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PAGE: 1

RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999 TIME: 11:22:36

INPUT SET: S31474.raw

This Raw Listing contains the General Information Section and those Sequences containing ERRORS.

	1	SEQUENCE LISTING	
	2		
	3	(1) General Information:	
	4	(i) APPLICANT: Malcolm, Bruce Taremi, Shahriar S. Weber, Patricia Corrected Diskette Needed	
	5	(i) APPLICANT: Malcolm, Bruce Corrected Di Comply	
	6	Taremi, Shahriar S.	
	7	Weber, Patricia	t
	8	Yao, Nanhua	
	9		
	10	(ii) TITLE OF INVENTION: Covalent Complexes of Hepatitis C Virus	
	11	NS3 Protease and NS4A Cofactor Peptide	
	12		
>	13	(iii) NUMBER OF SEQUENCES: 123	
	14		
	15	(iv) CORRESPONDENCE ADDRESS:	
	16	(A) ADDRESSEE: Schering-Plough Corp.	
	17	(B) STREET: 2000 Galloping Hill Road	
	18	(C) CITY: Kenilworth	
	19	(D) STATE: New Jersey	
	20	(E) COUNTRY: USA	
	21	(F) ZIP: 07030	
	22		
	23	(v) COMPUTER READABLE FORM:	
	24	(A) MEDIUM TYPE: Floppy disk	
	25	(B) COMPUTER: Power Macintosh	
	26	(C) OPERATING SYSTEM: 8.0.1	
	27	(D) SOFTWARE: Microsoft Word 6.0.1	
	28		
	29	(Vi) CURRENT APPLICATION DATA:	
	30	(A) APPLICATION NUMBER: US 09/198,723	
	31	(B) FILING DATE: 24 NOV 1998	
	32	(C) CLASSIFICATION:	
	33		
	34	(viii) ATTORNEY/AGENT INFORMATION:	
	35	(A) NAME: McLaughlin, Jaye P.	
	36	(B) REGISTRATION NUMBER: 41,211	
	37	(C) REFERENCE/DOCKET NUMBER: JB0800	
	38	(in) MELEGOVAKINTGARTON INCODVARTON.	
	39	(ix) TELECOMMUNICATION INFORMATION:	
	40	(A) TELEPHONE: (908)298-5056	
	41	(B) TELEFAX: (908)298-5388	
	42		
	43 44		
	45		

RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999 TIME: 11:22:36

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ERRORED SEQUENCES FOLLOW:

4108	(2)	INF	ORMA'	rion	FOR	SEQ	ID 1	NO: 9:	2:								
4109																	
4110		(i)		_	CE CI												
4111			()	A) L	ENGT	H: 6	51 b	ase)	pair	S							
4112			(1	B) T	YPE:	nuc.	leic	acio	.								
4113			((C) S'	TRANI	DEDNI	ESS:	sing	gle								
4114			(1	D) T(OPOL	OGY:	line	ear									
4115																	
4116		(ii)) MOI	LECU	LE T	YPE:	CDN	A									
4117																	
4118																	
4119																	
4120		(ix)) FE	ATUR	E:												
4121		•	(1	A) N	AME/I	KEY:	CDS										
4122			(1	3) L(OCAT	ON:	1	551									
4123			•	•													•
4124																	
4125		(xi	SEC	OUEN	CE DI	SCR	IPTI	on: s	SEO :	ID NO	0:92	:					
4126		(,,									-					
4127	ATG	GGC	AGC	AGC	CAT	CAT	САТ	САТ	САТ	CAC	AGC	AGC	GGC	СТС	GTG	CCG	48
4128		_			His										_		
4129	1	OL,	201	501	5			1110		10	001	DCI	O _T y	шса	15	110	
4130	-				•					10							
4131	CGC	aac	ACC	СУТ	ATG	CCT	ጥርጥ	CTT	CTT	א ידיידי	COT	GGT	λGλ	አ ጥጥ	א ידיידי	ጥጥለ	96
4131					Met												90
4132	Arg	СТУ	Ser	20	Mec	GLY	per	νат	25	TTE	Val	СТУ	Arg	30	тте	neu	
4134				20					25					30			
4134	m.c.m	a a m	х ст	COM	N CITT	N TO CI	200	aaa	m x a	maa	CA A	a a a	300	aaa	000	CITE A	144
					AGT												144
4136	ser	GTĀ		стА	Ser	тте	THE		Tyr	ser	GIN	GIN		Arg	GLY	Leu	
4137			35					40					45				
4138	amm	~~~	maa							~~~						ama	
4139					ATC												192
4140	Leu		cys	тте	Ile	Thr		Leu	Thr	GTÀ	Arg	_	Lys	Asn	GIn	Val	
4141		50					55					60					
4142																	
4143					CAG												240
4144		Gly	Glu	Val	Gln	Val	Val	Ser	Thr	Ala	Thr	Gln	Ser	Phe	Leu		
4145	65					70					75					80	
4146																	
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4148	Thr	Cys	Val	Asn	Gly	Val	Cys	Trp	Thr	Val	Tyr	His	Gly	Ala	Gly	Ser	
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4153	-			100	-		-	-	105					110			
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4354														A.C.	11 01	DEI: DJI474.	un
4154	ama	a s a	ara	a a a	оша	ama	aaa	maa	a a a	000	000	000	000	000	ааш	maa	204
4155							GGC										384
4156	vaı	ASP		ASP	Leu	var	Gly	_	GIN	Ата	Pro	Pro	_	АТа	Arg	261	
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4158																	
4159							GGC										432
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4170																	
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4172							Gly										
4173	110	204	200	180		201	- 1		185		O _T		1 110	190		7.20	
4174				100					100					170			
4175	сπа	TGC	ACC	ccc	GGG	CTT	GCG	AAG	aca	GTG.	GAC	արարար	стс	CCC	GT A	GAG	624
4176							Ala										024
4177	Val	Cys	195	Arg	СТУ	Val	ALG	200	ATG	Val	ASP	FIIE	205	PIO	νат	Giu	
			193					200					205				
4178	maa	* ma	a 2 2	» am	3 CITI	» ma	000	mam	ma s								C = 1
4179							CGG		TGA								651
4100	~~~	14-1	a1	m1	mi	14-1	3	~ ~ ~									
4180	Ser		Glu	Thr	Thr	Met	_	Ser			~				~=~	vo oo	
4181	Ser	210					215		1	(2)	INF	ORMA'	rion	FOR	SEQ	ID NO:93:	
4181 4182	Ser	210					215		1	(2)	INF	ORMAT	rion	FOR	SEQ	ID NO:93:	
4181 4182 4183	Ser	210) SE(QUENC	CE CI	HARAG	215 CTERI	CSTIC	cs:L	-1	INFO	orman X o	rion La	FOR	seq Let	ID NO:93:	
4181 4182 4183 4184	Ser	210) SE(QUENC	CE CH ENGTH	HARAG	215 CTERI 51 ba	STIC	cs: pairs	-1	INFO	orman X o	rion La	for ~d ,	seq Let	ID NO:93:	
4181 4182 4183 4184 4185	Ser	210) SE(() (1	QUENC LI (A) LI	CE CH ENGTH YPE:	HARAG	215 CTERI 51 ba Leic	ISTIC ase p acid	cs: pair:	-1	INF(orman X o	rion La	FOR ∕d ,	seq Let	ID NO:93:	
4181 4182 4183 4184 4185 4186	Ser	210) SE(() ()	QUENC A) LI B) TY	CE CH ENGTH YPE: TRANI	HARAG H: 65 nucl	215 CTERI 51 ba Leic ESS:	STIC ase p acid	cs: pair:	-1	INF(X O	rion La	FOR ∼d ,	seq L	ID NO:93:	
4181 4182 4183 4184 4185 4186 4187	Ser	210) SE(() ()	QUENC A) LI B) TY	CE CH ENGTH YPE: TRANI	HARAG H: 65 nucl	215 CTERI 51 ba Leic	STIC ase p acid	cs: pair:	-1	INF(RMAT X O	rion La	FOR ∕d ,	seq Let	ID NO:93:	
4181 4182 4183 4184 4185 4186 4187 4188	Ser	210 (i)) SE(() () ()	QUENCA) LI B) TY C) SY D) TO	CE CH ENGTH YPE: TRANI DPOLO	HARAC H: 65 nucl DEDNI DGY:	215 CTERI 51 ba Leic ESS: line	ISTIC ase p acic sinc ear	cs: pairs i gle	- <i>fr</i>	INFO	X O	La	FOR ∼d,	seq L	ID NO:93:	
4181 4182 4183 4184 4185 4186 4187 4188 4189	Ser	210 (i)) SE(() () ()	QUENCA) LI B) TY C) SY D) TO	CE CH ENGTH YPE: TRANI DPOLO	HARAC H: 65 nucl DEDNI DGY:	215 CTERI 51 ba Leic ESS:	ISTIC ase p acic sinc ear	cs: pairs i gle	- <i>fr</i>	INF(DRMAT	rion La	FOR ∼d ,	seq L	ID NO:93:	
4181 4182 4183 4184 4185 4186 4187 4188 4189 4190	Ser	210 (i)) SE(() () ()	QUENCA) LI B) TY C) SY D) TO	CE CH ENGTH YPE: TRANI DPOLO	HARAC H: 65 nucl DEDNI DGY:	215 CTERI 51 ba Leic ESS: line	ISTIC ase p acic sinc ear	cs: pairs i gle	- <i>fr</i>	INF(DRMAT	rion La	FOR	seq L	ID NO:93:	
4181 4182 4183 4184 4185 4186 4187 4188 4189	Ser	210 (i)) SE(() () ()	QUENCA) LI B) TY C) SY D) TO	CE CH ENGTH YPE: TRANI DPOLO	HARAC H: 65 nucl DEDNI DGY:	215 CTERI 51 ba Leic ESS: line	ISTIC ase p acic sinc ear	cs: pairs i gle	- <i>fr</i>	INF(X O	rion La	FOR	seq L	ID NO:93:	
4181 4182 4183 4184 4185 4186 4187 4188 4189 4190	Ser	210 (i)) SE(() () ()	QUENCA) LI B) TY C) SY D) TC	CE CH ENGTH YPE: TRANI DPOLO	HARAC H: 65 nucl DEDNI DGY:	215 CTERI 51 ba Leic ESS: line	ISTIC ase p acic sinc ear	cs: pairs i gle	- <i>fr</i>	inf(DRMAT X O	La	FOR ∼d ,	seq L	ID NO:93:	
4181 4182 4183 4184 4185 4186 4187 4188 4189 4190 4191	Ser	(ii)) SEQ (1 (1 (1) (1) MOI	QUENCA) LI B) TY C) SY D) TC	CE CHENGTHE PROPERTY OF TRANSPOLO	HARAC H: 65 nucl DEDNI DGY:	215 CTERI 51 ba Leic ESS: line	ISTIC ase p acic sinc ear	cs: pairs i gle	- <i>fr</i>	INF	DRMAT X O	rion La	FOR	seq Let	ID NO:93:	
4181 4182 4183 4184 4185 4186 4187 4188 4189 4190 4191 4192	Ser	(ii)) SE(() (1 () (1)) MOI	QUENC A) LI B) TY C) SY D) TO	CE CHENGTHE PROPERTY OF TRANSPORTED TO SERVICE TO SERVI	HARAC H: 6! nucl DEDNI DGY: YPE:	215 CTERI 51 ba Leic ESS: line	ISTIC ase p acic sinc ear	cs: pairs i gle	- <i>fr</i>	INF	X a	rion La	FOR	seq Let	ID NO:93:	
4181 4182 4183 4184 4185 4186 4187 4188 4189 4190 4191 4192 4193	Ser	(ii)) SE(() (1) (1) (1) MOI	QUENCA) LECUI	CE CHENGTHE YPE: TRANIOPOLO LE TY	HARAC H: 6! nucl DEDNI DGY: YPE:	215 CTERI 51 ba Leic ESS: line	ISTIC ase pacid sindear (gen	cs: pairs i gle	- <i>fr</i>	INFO	X a	rion La	FOR	seq L	ID NO:93:	
4181 4182 4183 4184 4185 4186 4187 4188 4189 4190 4191 4192 4193 4194	Ser	210 (i)) SE(() (1) (1) (1) MOI	QUENCA) LECUI	CE CHENGTHE YPE: TRANIOPOLO LE TY	HARAC H: 6! nucl DEDNI DGY: YPE:	215 CTERN 51 ba Leic ESS: line DNA	ISTIC ase pacid sindear (gen	cs: pairs i gle	- <i>fr</i>	INFO	X a	rion La	FOR	SEQ L	ID NO:93:	
4181 4182 4183 4184 4185 4186 4187 4188 4189 4190 4191 4192 4193 4194 4195	Ser	210 (i)) SE(() (1) (1) (1) MOI	QUENCA) LECUI	CE CHENGTHE YPE: TRANIOPOLO LE TY	HARAC H: 6! nucl DEDNI DGY: YPE:	215 CTERN 51 ba Leic ESS: line DNA	ISTIC ase pacid sindear (gen	cs: pairs i gle	- <i>fr</i>	INFO	X a	rion La	FOR	seq L	ID NO:93:	
4181 4182 4183 4184 4185 4186 4187 4188 4189 4190 4191 4192 4193 4194 4195 4196	Ser	210 (i) (ii)) SE() (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1	QUENCA) LIBO TY EST TY	CE CHENGTH YPE: TRANI OPOLO LE TY E: AME/I	HARAC H: 65 nucl DEDNI DGY: YPE: XEY: ION:	215 CTERN 51 ba Leic ESS: line DNA	ISTIC ase p acid sing ear (gen	cs: pairs d gle	- <i>f</i>	rl.	* 0	rion La	FOR	seq L	ID NO:93:	
4181 4182 4183 4184 4185 4186 4187 4188 4189 4190 4191 4192 4193 4194 4195 4196 4197	Ser	210 (i) (ii)) SE() (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1	QUENCA) LIBO TY EST TY	CE CHENGTH YPE: TRANI OPOLO LE TY E: AME/I	HARAC H: 65 nucl DEDNI DGY: YPE: XEY: ION:	215 CTERN 51 ba Leic ESS: line DNA CDS	ISTIC ase p acid sing ear (gen	cs: pairs d gle	- <i>f</i>	rl.	* 0	rion La	FOR	seq L	ID NO:93:	
4181 4182 4183 4184 4185 4186 4187 4188 4189 4190 4191 4192 4193 4194 4195 4196 4197 4198		210 (ii) (iii) (ix)) SE(QUENCA) LIBBO TY CO STORY CO S	CE CHENGTHE YPE: TRANI DPOLO LE TY E: AME/H DCATI	HARAGE NUCCEDENT OF THE PROPERTY OF THE PROPER	215 CTERN 51 ba Leic ESS: line DNA CDS 1	ISTICATE PARTIES OF THE PARTIES OF T	CS: pairs gle nomic	ED NO):93:	* o	La	rd,	ret	w	4.8
4181 4182 4183 4184 4185 4186 4187 4188 4189 4190 4191 4192 4193 4194 4195 4196 4197 4198 4199	ATG	210 (ii) (iii) (ix) (xi) GGC) SE() (1) (1) MOI) FE; (1) (1) SE()	QUENCA) LIBO TY C) SY C) SY C) TO LECUI ATURI A) NA B) LO QUENC	CE CHENGTH YPE: TRANI OPOLO LE TY E: AME/I OCATI	HARAGE NUCCEDENT OF THE PROPERTY OF THE PROPER	215 CTERD 51 ba Leic ESS: line DNA CDS 1	ISTICATE PARTIES OF THE PARTIES OF T	CS: pairs pairs gle nomic	ED NO):93:	* AGC	Ja GGC	~d ,	CTG.	ccc	48
4181 4182 4183 4184 4185 4186 4187 4188 4189 4190 4191 4192 4193 4194 4195 4196 4197 4198 4199 4200 4201	ATG Met	210 (ii) (iii) (ix) (xi) GGC) SE() (1) (1) MOI) FE; (1) (1) SE()	QUENCA) LIBO TY C) SY C) SY C) TO LECUI ATURI A) NA B) LO QUENC	CE CHENGTH YPE: TRANI OPOLO LE TY E: AME/I OCATI	HARAGE NUCCEDENT OF THE PROPERTY OF THE PROPER	215 CTERN 51 ba Leic ESS: line DNA CDS 1	ISTICATE PARTIES OF THE PARTIES OF T	CS: pairs pairs gle nomic	CAC His):93:	* AGC	Ja GGC	~d ,	GTG Val	ccc	48
4181 4182 4183 4184 4185 4186 4187 4188 4189 4190 4191 4192 4193 4194 4195 4196 4197 4198 4199 4200 4201 4202	ATG	210 (ii) (iii) (ix) (xi) GGC) SE() (1) (1) MOI) FE; (1) (1) SE()	QUENCA) LIBO TY C) SY C) SY C) TO LECUI ATURI A) NA B) LO QUENC	CE CHENGTHE YPE: FRANIPOPOLO LE TY E: AME/HOCATION CE DI CAT His	HARAGE NUCCEDENT OF THE PROPERTY OF THE PROPER	215 CTERD 51 ba Leic ESS: line DNA CDS 1	ISTICATE PARTIES OF THE PARTIES OF T	CS: pairs pairs gle nomic	ED NO):93:	* AGC	Ja GGC	~d ,	CTG.	ccc	48
4181 4182 4183 4184 4185 4186 4187 4188 4189 4190 4191 4192 4193 4194 4195 4196 4197 4198 4199 4200 4201 4202 4203	ATG Met	(ii) (iii) (ix) (xi) GGC Gly) SE() (1) (1) (1) (1) (1) (1) (1) (1) (2) (2) (3) (4) (4) (5) (5) (6) (7) (7) (7) (8) (8) (8) (9) (9) (9) (9) (9) (9) (9) (9) (9) (9	QUENC A) LH B) TY C) SY D) TO LECUI ATURE A) NA B) LO QUENC SET	CE CHENGTH YPE: TRANI OPOLO LE TY E: AME/H OCATI CE DH His 5	HARAGE NUCLOSED NO CONTROL CAT His	215 CTERN 51 ba Leic ESS: line DNA CDS 1 CAT His	CAT His	CS: pairs gle gle CAT His	CAC His	AGC Ser	AGC Ser	GGC	CTG Leu	GTG Val 15	CCG Pro	
4181 4182 4183 4184 4185 4186 4187 4188 4189 4190 4191 4192 4193 4194 4195 4196 4197 4198 4199 4200 4201 4202 4203 4204	ATG Met 1	(ii) (ix) (xi) GGC Gly GGC	SEQ (1) (1) (1) (1) (1) SEQ AGC Ser	QUENC A) LH B) TY C) SY D) TO LECUI ATURE A) NA B) LO QUENC Ser	CE CHENGTH YPE: TRANI OPOLO LE TY E: AME/H OCAT His 5	HARAGHE 69 NUCLOSED NO CONTROL CATHIS	215 CTERN 51 ba Leic ESS: line DNA CDS 1 CAT His	CSTIC ase pacid sing ear (gen 551 CAT His	CS: pairs gle gle CAT His	CAC His 10	AGC Ser	AGC Ser	GGC Gly	CTG Leu	GTG Val 15	CCG Pro	48
4181 4182 4183 4184 4185 4186 4187 4188 4189 4190 4191 4192 4193 4194 4195 4196 4197 4198 4199 4200 4201 4202 4203	ATG Met 1	(ii) (ix) (xi) GGC Gly GGC	SEQ (1) (1) (1) (1) (1) SEQ AGC Ser	QUENC A) LH B) TY C) SY D) TO LECUI ATURE A) NA B) LO QUENC Ser	CE CHENGTH YPE: TRANI OPOLO LE TY CE DI CAT His 5	HARAGHE 69 NUCLOSED NO CONTROL CATHIS	215 CTERN 51 ba Leic ESS: line DNA CDS 1	CSTIC ase pacid sing ear (gen 551 CAT His	CS: pairs gle gle CAT His	CAC His 10	AGC Ser	AGC Ser	GGC Gly	CTG Leu	GTG Val 15	CCG Pro	

RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

TIME: 11:22:37

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4208 4209			AGT Ser														144
4210	Ser	сту	35	СТУ	Ser	116	1111	40	ıyı	261	GIII	GIII	45	MIG	СТУ	Leu	
4211			33					40					43				
4212	СФФ	CCT	TGC	λAG	ΔͲሮ	ልሮሞ	A CC	Сфф	۸۵۸	GGC	caa	GAC	AAG	ልልሮ	CAG	GTC	192
4213			Cys														172
4214	nea	50	Cys	Ly5	110	****	55	шси	1111		n. y	60	uys	מא	0111	VUL	
4215		30					33					00					
4216	GAG	GGA	GAG	стт	CAG	GTG	GTT	TCC	ACC	GCA	ACA	CAA	TCC	ттс	CTG	GCG	240
4217			Glu														
4218	65	1				70					75					80	
4219																	
4220	ACC	TGC	GTC	AAC	GGC	GTG	TGT	TGG	ACC	GTT	TAC	CAT	GGT	GCT	GGC	TCA	288
4221			Val														
4222		-			85		-	_		90	_		_		95		
4223																	
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4225	Lys	Thr	Leu	Ala	Gly	Pro	Lys	Gly	Pro	Ile	Thr	Gln	Met	Tyr	Thr	Asn	
4226				100					105					110			
4227																	
4228			CAG														384
4229	Val	Asp	Gln	Asp	Leu	Val	Gly	_	Gln	Ala	Pro	Pro	Gly	Ala	Arg	Ser	
4230			115				•	120					125				
4231																	
4232			CCA														432
4233	Leu		Pro	Cys	Thr	Cys	_	Ser	Ser	Asp	Leu		Leu	Val	Thr	Arg	
4234		130					135					140					
4235	a a m	a a m	a.a	ama	3 mm	000	ama	000	000	000	000	a 2 a	a com	100	a aa	200	400
4236 4237			GAC														480
4237	145		Asp	val	TTE	150	vaı	Arg	Arg	Arg	155	ASP	Ser	Arg	сту	160	
4239	143					150					155					160	
4240	ርጥር	מייים	TCC	מממ	ΔGG	ССТ	GTC	ጥሮሮ	ТΔС	ጥጥር	ΔAG	GGC	ጥርጥ	TCG	ССТ	сст	528
4241			Ser														320
4242			201		165				-] -	170	_,_	0-1	201	501	175	02,	
4243										•							
4244	CCA	CTG	CTC	TGC	CCT	TCG	GGG	CAC	GCT	GTG	GGC	ATC	TTC	CGG	GCT	GCC	576
4245			Leu														
4246				180			_		185		-			190			
4247																	
4248	GTA	TGC	ACC	CGG	GGG	GTT	GCG	AAG	GCG	GTG	GAC	TTT	GTG	CCC	GTA	GAG	624
4249	Val	Cys	Thr	Arg	Gly	٧al	Ala	Lys	Ala	Val	Asp	Phe	Val	Pro	Val	Glu	
4250			195					200					205				
4251																	
4252			GAA						TGA	,							651
4253	Ser		Glu	Thr	Thr	Met	_	Ser									
4254		210					215		V	(2)	INFO	ORMA'	NOI	FOR	SEQ	ID NO:94:	
4255																	
4256		(i) SE(_													
4257					ENGTI					3							
4258					YPE:												
4259			((C) Si	rani	OEDNI	222:	sing	эте								

RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

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															IN	VPUT	SET: S	31474.raw
	4260			(I) T(POL	OGY:	line	ear						•			
	4261			·	•													
	4262		(ii)	MOI	LECUI	E T	PE:	DNA	(ger	nomi	:)							
	4263		` '								•							
	4264																	
	4265		(ix)	FEA	ATURI	2:												
	4266		\ /				KEY:	CDS			•							
	4267			-	-		CON:		551									
	4268			``	, _													
	4269																	
>	4270		/vi)	QF(MIEN	ות שי	79CD1	r DTT	ON: S	ero i	א מז	. 94						
	4271		(11)	, Day	20214		3 5 00.			Jug .		,,,,,	•					
	4272	አጥር	ccc	AGC	N.C.C	Слп	CAT	CAT	CAT	СУТ	CAC	N C C	A C C	GGC	СТС	GTG	CCG	48
	4272															Val		40
	4273	ме t 1	GIY	per	Ser	5	nrs	1113	1112	IIIS	10	Ser	Ser	СТУ	пец	15	FIU	
						3					10					13		
	4275	000	000	3.00	C A ITT	a ma	aam.	mam	Omm.	amm.	» mm	amm	aam	202	a mm	» mm	TTA	96
	4276																	96
	4277	arg	сту	ser		мет	GIY	ser	val		тте	Val	GTÅ	Arg		Ile	Leu	
	4278				20					25					30			
	4279								~~~			~				~~~	a= 1	
	4280																CTA	144
	4281	Ser	GTÀ		GTĀ	Ser	IIe	Thr		Tyr	ser	GIn	GIn		Arg	Gly	Leu	
	4282			35					40					45				
	4283																	
	4284															CAG		192
×	4285	Leu	Gly	Cys	Ile	Lys	Thr	Ser	Leu	Thr	Gly	Arg		Lys	Asn	Gln	Val	
	4286		50					55					60					
	4287																	
	4288	GAG	GGA	GAG	GTT	CAG	GTG	GTT	TCC	ACC	GCA	ACA	CAA	TCC	TTC	CTG	GCG	240
	4289	Glu	Gly	Glu	Val	Gln	Val	Val	Ser	Thr	Ala	Thr	Gln	Ser	Phe	Leu	Ala	
	4290	65					70					75					80	
	4291																	
	4292	ACC	TGC	GTC	AAC	GGC	GTG	TGT	TGG	ACC	GTT	TAC	CAT	GGT	GCT	GGC	TCA	288
	4293	Thr	Cys	Val	Asn	Gly	Val	Cys	Trp	Thr	Val	Tyr	His	Gly	Ala	·Gly	Ser	
	4294					85					90					95		
	4295				•													
	4296	AAG	ACC	TTA	GCC	GGC	CCA	AAG	GGG	CCA	ATC	ACC	CAG	ATG	TAC	ACT	AAT	336
	4297	Lys	Thr	Leu	Ala	Gly	Pro	Lys	Gly	Pro	Ile	Thr	Gln	Met	Tyr	Thr	Asn	
	4298	-			100	•		_	_	105					110			
	4299																	
	4300	GTG	GAC	CAG	GAC	CTC	GTC	GGC	TGG	CAG	GCG	CCC	CCC	GGG	GCG	CGT	TCC	384
	4301	Val	Asp	Gln	Asp	Leu	Val	Glv	Trp	Gln	Ala	Pro	Pro	Gly	Ala	Arg	Ser	
	4302		_	115	-			_	120					125		_		
	4303																	
	4304	TTG	ACA	CCA	TGC	ACC	TGT	GGC	AGC	TCA	GAC	СТТ	TAC	TTG	GTC	ACG	AGA	432
	4305															Thr		
	4306	204	130		-,5		-10	135					140				5	
	4307		100					133					110					
	4307	CAT	COT	GNC	GTIC	አ ጥጥ	מממ	QTQ.	כפכ	cee	ccc	aac	GAC	ልረም	λdd	GGG	ΔCC	480
	4308															Gly		400
			HTG	ьsр	νат	тте	150	νат	HIG	ALG	Arg	_	нар	26I	ar 9	сту	160	
	4310	145					120					155					100	
	4311	ama.	ama	шаа	aaa	3.00	aam	ama	шаа	шх∼	mma	224	000	mam	maa	aam	aam	F 2 2
	4312	CIG	CTC	100	CCC	AGG	CCT	GIC	100	TAC	116	AAG	GGC	ICI	106	GGT	GGT	528

RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

															IΛ	PUT	SET: S31474.	raw
	4313	Leu	Leu	Ser	Pro	Arq	Pro	Val	Ser	Tyr	Leu	Lys	Gly	Ser	Ser	Gly	Gly	
	4314					165				- 2 -	170					175	-	
	4315																	
	4316	CCA	CTG	СТС	TGC	CCT	TCG	GGG	CAC	GCT	GTG	GGC	ATC	TTC	CGG	GCT	GCC	576
	4317										Val							
	4318				180			2		185		3			190			
	4319																	
	4320	GTA	TGC	ACC	CGG	GGG	GTT	GCG	AAG	GCG	GTG	GAC	ւլուրու	GTG	CCC	GTA	GAG	624
	4321										Val							
	4322		0,5	195		1			200	****	,			205			014	
	4323													200				
	4324	TCC	ATG	GAA	ΔСТ	ACT	ΔТС	CGG	тст	тса								651
	4325		Met							. 0	/							001
	4326		210					215		\mathscr{L}	(2)	TNF	ימאאכ	TON	FOR	SEO	ID NO:95:	
	4327										(-,			01.		222		
	4328		(i)	SEC	HENC	CE CE	IARAC	ומשיי	STIC	15:								
	4329		(-)	-		ENGTI					=							
	4330					YPE:					•		٠					
	4331			-		FRANI												
	4332					POL				,								
	4333			` -	, -													
	4334		(ii)	мог	ECUI	LE TY	PE:	DNA	(ger	omio	-)							
	4335								(30.		-,							
	4336																	
	4337		(ix)) FE	ATURI	3:												
	4338		, ,			AME/E	EY:	CDS										
	4339			•	•	CAT			551									
	4340			` '	,													
	4341																	
>	4342		(xi)	SEC	OUENC	E DE	SCRI	PTIC	N: 5	SEO I	D NO	95:						
	4343		,,	,,					,	x -			•					
	4344	ATG	GGC	AGC	AGC	CAT	CAT	CAT	CAT	CAT	CAC	AGC	AGC	GGC	CTG	GTG	CCG	48
	4345										His							
	4346	1	3			5					10			3		15		
	4347																	
	4348	CGC	GGC	AGC	CAT	ATG	GGT	TCT	GTT	GTT	ATT	GTT	GGT	AGA	ATT	ATT	TTA	96
	4349	Arg	Gly	Ser	His	Met	Gly	Ser	Val	Val	Ile	Val	Gly	Arq	Ile	Ile	Leu	
	4350	_	•		20		-			25			•	-	30			
	4351																	
	4352	TCT	GGT	AGT	GGT	AGT	ATC	ACG	GCC	TAC	TCC	CAA	CAG	ACG	CGG	GGC	CTA	144
	4353	Ser	Gly	Ser	Gly	Ser	Ile	Thr	Ala	Tyr	Ser	Gln	Gln	Thr	Arg	Gly	Leu	
	4354		_	35	_				40	_				45	-	_		
	4355																	
	4356	CTT	GGT	TGC	AAG	AAG	ACT	AGC	CTT	ACA	GGC	CGG	GAC	AAG	AAC	CAG	GTC	192
	4357	Leu	Gly	Cys	Lys	Lys	Thr	Ser	Leu	Thr	Gly	Arg	Asp	Lys	Asn	Gln	Val	
	4358		50					55			_	-	60	_				
	4359																	
	4360	GAG	GGA	GAG	GTT	CAG	GTG	GTT	TCC	ACC	GCA	ACA	CAA	TCC	TTC	CTG	GCG	240
	4361	Glu	Gly	Glu	Val	Gln	Val	Val	Ser	Thr	Ala	Thr	Gln	Ser	Phe	Leu	Ala	
	4362	65	_				70					75					80	
	4363																	
	4364	ACC	TGC	GTC	AAC	GGC	GTG	TGT	TGG	ACC	GTT	TAC	CAT	GGT	GCT	GGC	TCA	288
	4365	Thr	Cys	Val	Asn	Gly	Val	Cys	Trp	Thr	Val	Tyr	His	Gly	Ala	Gly	Ser	
						-			_					_				

RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

														IN	PUT	SET: S31474.	raw
4366					85					90					95		
4367																	
4368	AAG	ACC	TTA	GCC	GGC	CCA	AAG	GGG	CCA	ATC	ACC	CAG	ATG	TAC	ACT	AAT	336
4369	Lys	Thr	Leu	Ala	Gly	Pro	Lys	Gly	Pro	Ile	Thr	Gln	Met	Tyr	Thr	Asn	
4370				100					105					110			
4371																	
4372	GTG	GAC	CAG	GAC	CTC	GTC	GGC	TGG	CAG	GCG	CCC	CCC	GGG	GCG	CGT	TCC	384
4373	Val	Asp	Gln	Asp	Leu	Val	Gly	Trp	Gln	Ala	Pro	Pro	Gly	Ala	Arg	Ser	
4374			115					120					125				
4375																	
4376	TTG	ACA	CCA	TGC	ACC	TGT	GGC	AGC	TCA	GAC	CTT	TAC	TTG	GTC	ACG	AGA	432
4377	Leu	Thr	Pro	Cys	Thr	Cys	Gly	Ser	Ser	Asp	Leu	Tyr	Leu	Val	Thr	Arg	
4378		130					135					140					
4379																	
4380					ATT												480
4381	His	Ala	Asp	Val	Ile	Pro	Val	Arg	Arg	Arg	Gly	Asp	Ser	Arg	Gly	Ser	
4382	145					150					155					160	
4383																	
4384					AGG												528
4385	Leu	Leu	Ser	Pro	Arg	Pro	Val	Ser	Tyr		Lys	Gly	Ser	Ser	_	Gly	
4386					165					170					175		
4387																	
4388					CCT												576
4389	Pro	Leu	Leu	_	Pro	Ser	СТÄ	His		Val	СТÀ	Ile	Phe	_	Ala	Ala	
4390				180					185					190			
4391																	
4392					GGG												624
4393	vaı	Cys		Arg	Gly	vaı	АТа	_	А⊥а	vaı	Asp	Phe		Pro	Va⊥	GLu	
4394			195					200					205				
4395	maa	3.000	a. .	s am	3 CM	3 ma	999	mam	шаз								CF3
4396 4397					ACT				TGA	1							651
4397	Ser	210	GIU	THE	Thr	мес		Ser	\mathcal{C}	(12)	TNE	DMAG	TT ON	EOD	CEO	ID NO:96:	
4399		210					215			(2)	TNEC	JKMA.	LION	FOR	PFÕ	ID NO: 36:	
4400		/ i '	\ CF(אוודאו	CE CI	א מם גנ	יתקים.	remt/	٠.								
4401		(-			ENGTI					=							
4402			-	-	PE:				-	-							
4403			•	•	rani						•						
4404			•	•	OPOLO				,								
4405			٠,٠	-, -													
4406		(ii') MOI	LECUI	E TY	YPE:	CDN	A								•	
4407		, ,	, - -														
4408																	
4409																	
4410		(ix) FE	ATURI	3:												
4411					AME/E	KEY:	CDS										
4412			-		CAT			551									
4413			•	•													
4414																	
4415		(xi)) SE(QUEN	CE DE	ESCR	PTI	ON: S	SEQ I	D NO	96:	:					
4416		•															
4417					CAT												48
4418	Met	Gly	Ser	Ser	His	His	His	His	His	His	Ser	Ser	Gly	Leu	Val	Pro	

RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

4419	1		5			10				IN	<i>PUT</i> 15	SET: S31474.	raw
4420 4421 4422 4423 4424			ATG Met										96
4425 4426 4427 4428			AGT Ser										144
4429 4430 4431 4432			ATC Ile										192
4433 4434 4435 4436			CAG Gln										240
4437 4438 4439 4440			GGC Gly 85										288
4441 4442 4443 4444			GGC Gly										336
4445 4446 4447 4448			CTC Leu										384
4449 4450 4451 4452			ACC Thr										432
4453 4454 4455 4456			ATT Ile										480
4457 4458 4459 4460			AGG Arg 165										528
4461 4462 4463 4464			CCT Pro										576
4465 4466 4467 4468			GGG Gly										624
4469 4470 4471		Glu	ACT Thr		TG)	(2)	INFO	ORMA'	rion	FOR	SEQ	ID NO:97:	651

RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999 TIME: 11:22:39

INPUT SET: S31474.raw

															II	VPUT	SET:	8314/4.raw
	4472																	
	4473		(i	•	_				ISTI									
	4474			•	•				ase y	•	S							
	4475								aci									
	4476								sin	gle								
	4477			(1	D) T(OPOL	OGY:	line	ear									
	4478																	
	4479		(ii) MO	LECU	LE T	YPE:	CDN	A									
	4480			-														
	4481																	
	4482		(ix) FE	ATUR	E :												
	4483			()	A) N	AME/	KEY:	CDS										
	4484			(]	B) L	OCAT:	ION:	1	651						•			
	4485																	
	4486																	
>	4487		(xi) SE	QUEN	CE D	ESCR:	[PTI	ON:	SEQ :	ID N	0:97	:					
	4488									_	-							
	4489	ATG	GGC	AGC	AGC	CAT	CAT	CAT	CAT	CAT	CAC	AGC	AGC	GGC	CTG	GTG	CCG	48
	4490	Met	Gly	Ser	Ser	His	His	His	His	His	His	Ser	Ser	Gly	Leu	Val	Pro	
	4491	1	-			5					10			•		15		
	4492																	
	4493	CGC	GGC	AGC	CAT	ATG	GGT	TCT	GTT	GTT	ATT	GTT	GGT	AGA	ATT	ATT	TTA	96
	4494												Gly					
	4495		-		20		-			25			-		30			
	4496																	
	4497	TCT	GGT	AGT	GGT	AGT	ATC	ACG	GCC	TAC	TCC	CAA	CAG	ACG	CGG	GGC	CTA	144
	4498												Gln					
	4499			35	2				40	- 1 -				45	5	1		
	4500								_									
	4501	CTT	GGT	TGC	AAG	ATC	ACT	AGC	СТТ	ACA	GGC	CGG	GAC	AAG	AAC	CAG	GTC	192
	4502												Asp					
	4503		50	- 1 -	-1-			55			1	5	60	-1-				
	4504							•					•					
	4505	GAG	GGA	GAG	СТТ	CAG	GTG	GTT	TCC	ACC	GCA	ACA	CAA	TCC	TTC	CTG	GCG	240
	4506												Gln					
	4507	65	3				70					75					80	
	4508																- •	
	4509	ACC	TGC	GTC	AAC	GGC	GTG	TGT	TGG	ACC	GTT	TAC	CAT	GGT	GCT	GGC	TCA	288
	4510												His					
	4511		4			85		- , -	E		90	- , -		1		95		
	4512																	
	4513	AAG	ACC	TTA	GCC	GGC	CCA	AAG	GGG	CCA	ATC	ACC	CAG	ATG	TAC	ACT	AAT	336
	4514												Gln					
	4515	-1-			100	1		-1-	,	105					110			
	4516																	
	4517	GTG	GAC	CAG	GAC	CTC	GTC	GGC	TGG	CAG	GCG	מממ	CCC	GGG	aca	ССТ	חככ	384
	4518												Pro					304
	4519			115	p	u	* U.L	O L Y	120	O # 11	A.LU	110		125	ALU	n. 9	DG1	
	4520			-15					120					123				
	4521	ጥጥር፤	מטמ	CCA	TCC	ΔCC	ጥርም	GGC	ΔCC	ጥ ሮ ል	GAC	Сфф	TAC	ጥጥር	GTC	Δďď	ΔGA	432
	4522												Tyr					432
	4523	Ten	130	110	Cys	1111	cys	135	SeT	⊃-r	vob	neu	140	n-eu	Val	TILL	ALG	
	4524		130					133					7-40					
	3J47																	

RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

														73		CDW. C21.	47.4
	~~~		~~~	ama		~~~	ama	~~~	~~~		~~~	a. a				SET: S314	
4525						CCG											480
4526		АТа	Asp	val	тте	Pro	vaı	Arg	Arg	Arg	_	Asp	ser	Arg	GTA		
4527	145					150					155					160	
4528																	
4529						CCT											528
4530	Leu	Leu	Ser	Pro		Pro	Val	Ser	Tyr	Leu	Lys	Gly	Ser	Ala	Gly	Gly	
4531					165					170					175		
4532																	
4533	CCA	CTG	CTC	TGC	CCT	TCG	GGG	CAC	GCT	GTG	GGC	ATC	TTC	CGG	GCT	GCC	576
4534	Pro	Leu	Leu	Cys	Pro	Ser	Gly	His	Ala	Val	Gly	Ile	Phe	Arg	Ala	Ala	
4535				180			_		185					190			
4536																	
4537	GTA	TGC	ACC	CGG	GGG	GTT	GCG	AAG	GCG	GTG	GAC	TTT	GTG	CCC	GTA	GAG	624
4538						Val											
4539		-1-	195	5	1			200					205				
4540			1,0														
4541	<b>דר</b> כ	ΔТС	GAA	ΔСΨ	ΔСТ	ATG	CGG	тст	TG	Δ							651
4542						Met			101	<b>^</b> /							031
4542	Ser	210	GIU	1111	1111	Mec	215	Der	4	(2)	TNE	יאשמר	T C N	EOD.	CEO.	ID NO:9	
4544		210					213			(2)	INE	JKMA .	LION	FOR	SEQ	10 NO. 3	
4544		/4 9	CE/	ALIENIA	ים מי	IARAC	ים שחי	r em T	70.						•		
		( 1		_		14 65				_						•	
4546			•	•				-	•	>							
4547						nucl											
4548						DEDNE			зте								
4549			( 1	) TC	POLC	OGY:	Tine	ear									
4550							- 537										
4551		(11)	) MOI	'ECOI	E TY	PE:	CDN	4									
4552																	
4553					_												
4554		(1X)		ATURI													
4555			•	•		KEY:											
4556			(1	3) L(	CAT	CON:	1	551									
4557																	
4558		_															
4559		(xi)	) SE	QUEN	CE DE	ESCRI	(PTI	ON: S	SEQ 1	ED NO	98:	:					
4560																	
4561						CAT											48
4562	Met	Gly	Ser	Ser	His	His	His	His	His	His	Ser	Ser	Gly	Leu	Val	Pro	
4563	1				5					10					15		
4564																	
4565	CGC	GGC	AGC	CAT	ATG	GGT	TCT	GTT	GTT	ATT	GTT	GGT	AGA	ATT	ATT	TTA	96
4566	Arg	Gly	Ser	His	Met	Gly	Ser	Val	Val	Ile	Val	Gly	Arg	Ile	Ile	Leu	
4567	_	_		20		_			25			_	_	30			
4568																	
4569	TCT	GGT	AGT	GGT	AGT	ATC	ACG	GCC	TAC	TCC	CAA	CAG	ACG	CGG	GGC	CTA	144
4570						Ile											
4571		-2	35	-2				40					45		- 3		
4572																	
4573	Стт	GGT	ጥርር	ΑͲС	AAG	ACT	AGC	Стт	ACA	GGC	CGG	GAC	AAG	AAC	CAG	GTC	192
4574						Thr											
4575	Leu	50	Cys	-16	_,,,		55	Lou	****	O L y	y	60	_,,	AUII	O_111	, 41	
4576		50					"					50					
	CAC	CCA	GAG	Cimm	CAC	QTIC.	Cum	TOO	N C C	GC 3	אמא	CAA	ሞሮር	መመረባ	CITIC	aca	240
4577	GAG	GGA	GAG	OII.	CHG	GTG	GII	100	ACC	GCA	ACA	CAA	100	110	CIG	300	240

#### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

														IN	PUT	SET: S31474.	raw
4578	Glu	Gly	Glu	Val	Gln	Val	Val	Ser	Thr	Ala	Thr	Gln	Ser				
4579	65	•				70					75					80	
4580																	
4581					GGC												288
4582	Thr	Cys	Val	Asn	Gly	Val	Cys	Trp	Thr	Val	Tyr	His	Gly	Ala	Gly	Ser	
4583					85					90					95		
4584																	
4585					GGC												336
4586	Lys	Thr	Leu	Ala	Gly	Pro	Lys	Gly	Pro	Ile	Thr	Gln	Met	Tyr	Thr	Asn	
4587				100					105					110			
4588																	
4589					CTC												384
4590	Val	Asp		Asp	Leu	Val	Gly	_	Gln	Ala	Pro	Pro	Gly	Ala	Arg	Ser	
4591			115					120					125				
4592																	
4593																AGA	432
4594	Leu	Thr	Pro	Cys	Thr	Cys	Gly	Ser	Ser	Asp	Leu	Tyr	Leu	Val	Thr	Arg	
4595		130					135					140					
4596																	
4597					ATT												480
4598	His	Ala	Asp	Val	Ile	Pro	Val	Arg	Arg	Arg	Gly	Asp	Ser	Arg	Gly		
4599	145					150					155					160	
4600																	
4601					AGG												528
4602	Leu	Leu	Ser	Pro	Arg	Pro	Val	Ser	Tyr		Lys	Gly	Ser	Ala		Gly	
4603					165					170					175		
4604																	
4605					CCT												576
4606	Pro	Leu	Leu	_	Pro	Ser	Gly	His		Val	Gly	Ile	Phe	_	Ala	Ala	
4607				180					185					190			
4608																	
4609					GGG												624
4610	Val	Cys		Arg	Gly	Val	Ala	-	Ala	vaı	Asp	Phe		Pro	vaı	GIU	
4611			195					200					205				
4612								~~~									653
4613					ACT				TGA	1							651
4614	ser		GIU	Thr	Thr	мет	_	Ser	C	/12	TNE	ND1485		HAD	ano.	TD NO.00.	
4615		210					215		_	<b>(2)</b>	INE	JKMA'	LION	FOR	PEŐ	ID NO:99:	
4616		, ,		~ * *****		73 TO B 4	-000	T CIMIT	7.O.								
4617		(1	-	_	CE CI					_							
4618 4619					ENGT					5							
4620					YPE:												
4620 4621					TRANI OPOLO				) TE								
4621			( )	ין ני	OLOT(	,100	TT116	=ar									
4622		144	) MO	י היים	LE T	DF.	CDM	λ.									
4623		( T T	וטמי ,	LECU.	LE 173	.FE;	CDM	н.									
4624																	
4625		/ + +	<b>।</b> । जन्म	ATUR													
4626		(TX	•		L: AME/I	7FV.	ana										
4627					OCAT:			651									
4629			( )	ים וים	JUAI.	. 014.	1										
4630																	
±020											•						

#### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

INPUT SET: S31474.raw

															IN	<i>IPUT</i>	SET: S	83 <i>1474.raw</i>
>	4631		(xi	) SE(	QUEN	CE DI	ESCR	PTI	ON: S	SEQ I	D NO	0:99	:					
	4632																	
	4633											AGC				_		48
	4634		СТÄ	Ser	Ser		His	His	His	His		Ser	Ser	GTĀ	Leu		Pro	
	4635	1				5					10					15		
	4636																mma	0.0
	4637											GTT						96
	4638	Arg	стА	ser		мет	GTA	ser	vaı		тте	Val	GTA	Arg		тте	Leu	
	4639				20					25					30			
	4640		aam						~~~	a	<b></b>	~	a. a		~~~	~~~	am.	244
	4641											CAA						144
	4642	ser	СТА		GTA	ser	тте	Thr		Tyr	ser	Gln	GIN		Arg	GTA	Leu	
	4643			35					40					45				
	4644	OMM.	ааш	шаа	330	330	3 OIII	3.00	amm	3/73	000	000	<b>a</b> a a		* * *	a 2 a	ama	100
	4645											CGG						192
	4646 4647	ьeu	_	Cys	гая	гуѕ	THE		Leu	THE	GLY	Arg		гуs	ASII	GIII	Val	
	4648		50					55					60	•				
	4649	dad	CCX	a » a	c mm	C A C	ama	C III III	maa	3.00	OO 3	ACA	<b>733</b>	maa	mm/c	ama	aaa	240
	4650											Thr						240
	4651	65	СТУ	GIU	Val	GIII	70	νат	Ser	1111	АТа	75	GIII	Ser	FILE	nea	80	
	4652	0.5					70					, ,					00	
	4653	ACC	TCC	GTC	אאר	GGC	GTG.	ጥረጥ	ጥርር	<b>ACC</b>	CTTT	TAC	СУП	сст	CCT	GGC	тса	288
	4654											Tyr						200
	4655		0,0			85	, ,	0,0			90	- 7 -		027		95	001	
	4656					•					- •							
	4657	AAG	ACC	TTA	GCC	GGC	CCA	AAG	GGG	CCA	ATC	ACC	CAG	ATG	TAC	ACT	AAT	336
	4658											Thr						
	4659	_			100	-		-	•	105					110			
	4660																	
	4661	GTG	GAC	CAG	GAC	CTC	GTC	GGC	TGG	CAG	GCG	CCC	CCC	GGG	GCG	CGT	TCC	384
	4662	Val	Asp	Gln	Asp	Leu	Val	Gly	Trp	Gln	Ala	Pro	Pro	Gly	Ala	Arg	Ser	
	4663			115					120					125				
	4664																	
	4665											CTT						432
	4666	Leu		Pro	Cys	Thr	Cys	-	Ser	Ser	Asp	Leu	-	Leu	Val	Thr	Arg	
	4667		130		•			135					140					
	4668	a	~~	~~~	ama.	<b>3</b> mm					~~~	~~~	a. a			~~~		400
	4669											GGC						480
	4670 4671	145	АТА	Asp	vат	тте			_	_	_	Gly	_		_	_		
	4672	143					150					155					160	
	4673	CTG	כיייכ	ייככ	מממ	AGG	ССТ	GTC.	ሞሮሮ	ሞልሮ	ጥጥር	AAG	aac	ጥርጥ	CCT	ccm	CCT	528
	4674											Lys						320
	4675					165		•	501	-1-	170	۵,5	<b>0</b> -1	501		175	,	
	4676																	
	4677	CCA	CTG	CTC	TGC	ССТ	TCG	GGG	CAC	GCT	GTG	GGC	ATC	TTC	CGG	GCT	GCC	576
	4678											Gly						- · ·
	4679	-			180			- 4		185		- 4			190			
	4680																	
	4681	GTA	TGC	ACC	CGG	GGG	GTT	GCG	AAG	GCG	GTG	GAC	TTT	GTG	CCC	GTA	GAG	624
	4682	Val	Cys	Thr	Arg	Gly	Val	Ala	Lys	Ala	Val	Asp	Phe	Val	Pro	Val	Glu	
	4683			195					200			_		205				

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999 TIME: 11:22:40

INPUT SET: S31474.raw

															IN	<b>VPUT</b>	SET: S.	31474.raw
	4684	maa		<i>a</i>		3 CM			mam	ma.								<b>6</b> - 3
	4685					ACT				TGA	/							651
	4686	Ser		GIU	THE	Thr	мес	_	ser	(/	(12)	TNE	201481	#T 0 N	HOD	CEO	ID NO	
	4687 4688		210					215			(2)	TME	JKMA'	LTOM	FUR	SEQ	ID NC	7:100:
	4689		/ 4 9	\ CE/	AL LEGIST	CE CI	אממגי	ימשחר.		70.								
	4690		( + ,		_	ENGTI												
	4691					YPE:												
	4692					rani												
	4693					OPOL			-	<b>3</b> +0								
	4694			١,	, .	JI OL.			Jul									
	4695		/ii'	) MOI	ECU	LE T	PE:	CDNA	Δ									
	4696		,	,				02	•									
	4697																	
	4698		(ix	) FE	ATURI	Ξ:												
	4699		,	•		AME/I	KEY:	CDS										
	4700			•	•	CAT:			551									
>	4701		(xi)			CE DI				SEQ :	ED NO	0:100	):					
	4702		•							-								
	4703	ATG	GGC	AGC	AGC	CAT	CAT	CAT	CAT	CAT	CAC	AGC	AGC	GGC	CTG	GTG	CCG	48
	4704	Met	Gly	Ser	Ser	His	His	His	His	His	His	Ser	Ser	Gly	Leu	Val	Pro	
	4705	1	_			5					10			_		15		
	4706																	
	4707	CGC	GGC	AGC	CAT	ATG	GGT	TCT	GTT	GTT	ATT	GTT	GGT	AGA	ATT	ATT	TTA	96
	4708	Arg	Gly	Ser	His	Met	Gly	Ser	Val	Val	Ile	Val	Gly	Arg	Ile	Ile	Leu	
	4709				20					25					30			
	4710																	
	4711					GGT												144
	4712	Ser	Pro	Ala	Gly	Gly	Ile	Thr	Ala	Tyr	Ser	Gln	Gln	Thr	Arg	Gly	Leu	
	4713			35					40					45				
	4714																	
	4715					ATC												192
	4716	Leu		Cys	Ile	Ile	Thr		Leu	Thr	Gly	Arg	_	Lys	Asn	Gln	Val	
	4717		50					55					60					
	4718																	
	4719					CAG												240
	4720		СТĀ	GLu	Val	Gln		Va⊥	Ser	Thr	Ala		GIn	Ser	Phe	Leu		
	4721	65					70					75					80	
	4722	100	maa	ama		999	аша	mam	maa	3.00	amm	m. a	a		a a m	~~~	mas	000
	4723					GGC Gly												288
	4724	THE	cys	vaı	ASI		vaı	cys	тгр	Thr		туг	HIS	GIĀ	АТа		ser	
	4725 4726					85					90					95		
	4727	አአሮ	A C C	מיויים א	aaa	GGC	CCX	3 3 C	aaa	CCA	λπα	N.C.C	CAC	λTIC	ma C	хст	λλΠ	336
	4728					Gly												330
	4729	цуз	1111	пец	100	GIY	110	nys	GIY	105	TTE	1111	GIII	Mec	110	1111	ASII	
	4729				100					100					110			
	4731	QTO.	GAC	CAC	GAC	CTC	GTIC	ממת	ጥሮሮ	CAG	aca	מממ	כככ	aaa	aca	CCT	ሞርር	384
	4732					Leu												304
	4732	¥ 44 ±	rsp	115	rsb	Leu	* u 1	or y	120	-111	A.L	110	110	125	n_a	A+ 9	561	
	4734			113					120					143				
	4735	ጥጥር	ACA	CCA	TGC	ACC	тст	GGC	AGC	TCA	GAC	СТТ	TAC	ጥጥር፤	GTC	ACG	AGA	432
	4736					Thr												±32
			<b></b>		- ] -	<b></b>	- 1 -	1			P		- 1				<u>5</u>	

#### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

INPUT SET: S	\$31474.raw
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														IN	<b>IPUT</b>	SET: S3	1474.raw
4737		130					135					140					
4738																	
4739	CAT	GCT	GAC	GTC	ATT	CCG	GTG	CGC	CGG	CGG	GGC	GAC	AGT	AGG	GGG	AGC	480
4740	His	Ala	Asp	Val	Ile	Pro	Val	Arg	Arg	Arg	Gly	Asp	Ser	Arg	Gly	Ser	
4741	145					150					155	•				160	
4742																	
4743	CTG	CTC	TCC	CCC	AGG	CCT	GTC	TCC	TAC	TTG	AAG	GGC	TCT	TCG	GGT	GGT	528
4744	Leu	Leu	Ser	Pro	Arg	Pro	Val	Ser	Tyr	Leu	Lys	Gly	Ser	Ser	Gly	Gly	
4745					165					170					175		
4746																	
4747	CCA	CTG	CTC	TGC	CCT	TCG	GGG	CAC	GCT	GTG	GGC	ATC	TTC	CGG	GCT	GCC	576
4748	Pro	Leu	Leu	Cys	Pro	Ser	Gly	His	Ala	Val	Gly	Ile	Phe	Arg	Ala	Ala	
4749				180					185					190			
4750																	
4751	GTA	TGC	ACC	CGG	GGG	GTT	GCG	AAG	GCG	GTG	GAC	TTT	GTG	CCC	GTA	GAG	624
4752	Val	Cys	Thr	Arg	Gly	Val	Ala	Lys	Ala	Val	Asp	Phe	Val	Pro	Val	Glu	
4753			195					200					205				
4754																	
4755						ATG			TGA	/							651
4756	Ser	Met	Glu	Thr	Thr	Met	Arg	Ser	1								
4757		210					215		Ċ	(2)	INF	ORMA'	rion	FOR	SEQ	ID NO	:101:
4758																	
4759		(i)		_		IARAC											
4760						I: 65				3							
4761			•	•		nuc]											
4762				•		DEDNE			gle								
4763			( 1	) T(	POLO	GY:	line	ear									
4764		,,,,															
4765		(11	) MOI	FCOI	E TY	PE:	CDN	ł									
4766																	
4767 4768		/	र हादा	ומווחו	3 A												
4769		(IX		ATURE		rev.	ana										
4770			•	•		(EY:		5 5 1									
4771			(1	ים ונ	CAL	.ON:	1	) ) 1									
4772																	
4773		(xi	SEC	HENC	E DE	ESCR1	PTTC	N: 5	SEO 1	וא מו	1:101	1 :					
4774		\ <i>\</i>	,,	·		~~.		1				- •					
4775	ATG	GGC	AGC	AGC	CAT	CAT	CAT	CAT	CAT	CAC	AGC	AGC	GGC	CTG	GTG	CCG	48
4776						His											
4777		_											-			-	
4778	•				_												
4779	CGC	GGC	AGC	CAT	ATG	GGT	TCT	GTT	GTT	ATT	GTT	GGT	AGA	ATT	ATT	TTA	96
4780						Gly											
4781	,			20		_			25			4		30			
4782																	
4783	TCT	CCT	GCT	GGT	GGT	ATC	ACG	GCC	TAC	TCC	CAA	CAG	ACG	CGG	GGC	CTA	144
4784						Ile											
4785			35	-	*			40	-				45		-		
4786																	
4787	CTT	GGT	TGC	AAG	ATC	ACT	AGC	$\mathtt{CTT}$	ACA	GGC	CGG	GAC	AAG	AAC	CAG	GTC	192
4788	Leu	Gly	Cys	Lys	Ile	Thr	Ser	Leu	Thr	Gly	Arg	Asp	Lys	Asn	Gln	Val	
4789		50					55					60					

#### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999 TIME: 11:22:41

#### INPUT SET: S31474.raw GAG GGA GAG GTT CAG GTG GTT TCC ACC GCA ACA CAA TCC TTC CTG GCG Glu Gly Glu Val Gln Val Val Ser Thr Ala Thr Gln Ser Phe Leu Ala ACC TGC GTC AAC GGC GTG TGT TGG ACC GTT TAC CAT GGT GCT GGC TCA Thr Cys Val Asn Gly Val Cys Trp Thr Val Tyr His Gly Ala Gly Ser AAG ACC TTA GCC GGC CCA AAG GGG CCA ATC ACC CAG ATG TAC ACT AAT Lys Thr Leu Ala Gly Pro Lys Gly Pro Ile Thr Gln Met Tyr Thr Asn GTG GAC CAG GAC CTC GTC GGC TGG CAG GCG CCC CCC GGG GCG CGT TCC Val Asp Gln Asp Leu Val Gly Trp Gln Ala Pro Pro Gly Ala Arg Ser TTG ACA CCA TGC ACC TGT GGC AGC TCA GAC CTT TAC TTG GTC ACG AGA Leu Thr Pro Cys Thr Cys Gly Ser Ser Asp Leu Tyr Leu Val Thr Arg CAT GCT GAC GTC ATT CCG GTG CGC CGG CGC GAC AGT AGG GGG AGC His Ala Asp Val Ile Pro Val Arg Arg Gly Asp Ser Arg Gly Ser CTG CTC TCC CCC AGG CCT GTC TCC TAC TTG AAG GGC TCT TCG GGT GGT Leu Leu Ser Pro Arg Pro Val Ser Tyr Leu Lys Gly Ser Ser Gly Gly CCA CTG CTC TGC CCT TCG GGG CAC GCT GTG GGC ATC TTC CGG GCT GCC Pro Leu Cys Pro Ser Gly His Ala Val Gly Ile Phe Arg Ala Ala GTA TGC ACC CGG GGG GTT GCG AAG GCG GTG GAC TTT GTG CCC GTA GAG Val Cys Thr Arg Gly Val Ala Lys Ala Val Asp Phe Val Pro Val Glu TCC ATG GAA ACT ACT ATG CGG TCT TGA Ser Met Glu Thr Thr Met Arg Ser (2) INFORMATION FOR SEQ ID NO:102: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 1998 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: cDNA

#### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999 TIME: 11:22:41

#### INPUT SET: S31474, raw

														IΛ	PUT	SET:	831474.raw
4842		(ix)	FE!	ATURI	Ξ:												
4843			( 1	A) NA	AME/I	KEY:	CDS										
4844			( E	3) L(	CAT	CON:	1	L998									
4845																	
4846																	
4847		(xi)	SEC	QUEN	CE DE	ESCR	PTIC	on: s	SEQ :	ID NO	0:102	2:					
4848		•		_													
4849	ATG	GGC	AGC	AGC	CAT	CAT	CAT	CAT	CAT	CAC	AGC	AGC	GGC	CTG	GTG	CCG	48
4850	Met	Gly	Ser	Ser	His	His	His	His	His	His	Ser	Ser	Gly	Leu	Val	Pro	
4851	1	-			5					10			_		15		
4852																	
4853	CGC	GGC	AGC	CAT	ATG	GGT	TCT	GTT	GTT	ATT	GTT	GGT	AGA	ATT	ATT	TTA	96
4854	Arq	Glv	Ser	His	Met	Gly	Ser	Val	Val	Ile	Val	Gly	Arq	Ile	Ile	Leu	
4855		-		20		-			25			-		30			
4856																	
4857	TCT	GGT	AGT	GGT	AGT	ATC	ACG	GCC	TAC	TCC	CAA	CAG	ACG	CGG	GGC	CTA	144
4858							Thr										
4859		1	35	2				40	- 2 -				45	5			
4860																	
4861	СТТ	GGT	TGC	ATC	ATC	ACT	AGC	СТТ	ACA	GGC	CGG	GAC	AAG	AAC	CAG	GTC	192
4862							Ser										
4863		50	-1-				55			1	5	60	-7-				
4864																	
4865	GAG	GGA	GAG	GTT	CAG	GTG	GTT	TCC	ACC	GCA	ACA	CAA	TCC	TTC	CTG	GCG	240
4866							Val										
4867	65	0_1				70					75					80	
4868																	
4869	ACC	TGC	GTC	AAC	GGC	GTG	TGT	TGG	ACC	GTT	TAC	САТ	GGT	GCT	GGC	TCA	288
4870							Cys										
4871		Cys	vul	ASII	85	,,,	٠,5	₽		90	-1-	*****	<b>-</b>		95		
4872					0.5												
4873	AAG	ACC	ттΔ	gcc	GGC	CCA	AAG	GGG	CCA	ATC	ACC	CAG	AТG	TAC	ACT	ААТ	336
4874							Lys										
4875	_,_			100	,		-1-	1	105					110			
4876																	
4877	GTG	GAC	CAG	GAC	СТС	GTC	GGC	TGG	CAG	GCG	CCC	CCC	GGG	GCG	CGT	TCC	384
4878							Gly										
4879			115				1	120					125		5		
4880			110														
4881	TTG	ACA	CCA	TGC	ACC	тст	GGC	AGC	TCA	GAC	СТТ	TAC	TTG	GTC	ACG	AGA	432
4882							Gly										
4883		130		0,2		0,70	135					140				9	
4884		100					100										
4885	СУТ	сст	GAC	GTC	א חיידי מ	CCG	GTG	CGC	CGG	CGG	GGC	GAC	ΔСТ	AGG	ggg	AGC	480
4886							Val										400
4887	145	u	p			150		··• y	9	9	155		~~1	•••	1	160	
4888	173					100											
4889	СПС	פייים	יייכיכי	מממ	<b>A</b> GG	רכייי	GTC	ሞሮሮ	ጥልሮ	ጥጥር፤	ልልር	מפת	ጥርጥ	ሞርር	GGT	ССТ	528
4890							Val										520
4891	пеп	пeп	SGT	FIO	165	FIO	۷ат	Ser	- y -	170	пуз	сту	261	Der	175	O ± y	
4892					100					1,0					113		
4893	CCA	CTC	CTC	ሞሮሮ	CCT	ሞርር	GGG	CAC	CCm	ama	ggg	አጥሮ	ጥጥር	caa	CCT	acc	576
4894							Gly										370
4074	LIO	пeп	пeu	Cys	FIO	SET	GIA	1113	тта	۷ат	GTÅ	116	1116	719	WT G	AIG	

#### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

TIME: 11:22:42

DATE: 04/15/1999

														IN	PUT	SET:	S31474.raw
4895				180					185					190			
4896																	
4897	GTA	TGC	ACC	CGG	GGG	GTT	GCG	AAG	GCG	GTG	GAC	TTT	GTG	CCC	GTA	GAG	624
4898												Phe					
4899		-	195		-			200			-		205				
4900													- • -				
4901	TCC	ATG	GAA	АСТ	АСТ	ATG	CGG	тст	CCG	GTC	ттс	ACG	GAC	AAC	TCA	TCC	672
4902												Thr					٠. ـ
4903	201	210					215	202				220					
4904																	
4905	CCC	CCG	ggg	СΤΆ	CCG	CAG	тса	արար	CAA	стс	GCC	CAC	СТА	CAC	GCT	CCC	720
4906												His					, 20
4907	225	110	nau	•41	110	230			01	<b>*</b> 4±	235		ВСС	****	71.1.0	240	
4908	223					250					233					240	
4909	λСΤ	GGC	ACC	GGC	AAG	λст	ልሮሞ	λλλ	стс	CCG	ССТ	GCA	πаπ	CCA	GCC	CAA	768
4910												Ala					, 00
4911	1111	GLY	Ser	СТУ	245	Ser	1111	пуs	VOI	250	АТа	ALG	TYL	AIG	255	GIII	
4912					243					230					233		
4913	aca	mag	220	ama	ama	OTTO	CTTC	יחגג	ccc	maa	Cmm	GCC	COTT	A CC	מיחים	ccc	816
4914												Ala					010
4915	СТУ	TAT	гуз	260	red	var	red	ASII	265	Ser	Val	мта	АТА	270	neu	GTÅ	
4915				260					205					210			
4917	mmm	000	aaa	mam	a ma	mam	***	aas	ana	cam	» mm	ara	000	330	х ш ст	202	864
4917												GAC					004
	Pne	GTÄ		Tyr	мес	ser	гåг		HIS	сту	тте	Asp		ASI	тте	Arg	
4919			275					280					285				
4920	3.00	000	ста	3.00	3.00	s mm	3.00	202	aaa	000	aaa	ama	202	m x a	mam	3.00	010
4921						•						GTC					912
4922	THE	_	val	Arg	Thr	тте		Thr	GTÄ	АТА	Pro	Val	Thr	Tyr	ser	THE	
4923		290					295					300					
4924		~~~					~~~	aam		maa	mam	~~~		~~		a.a	0.60
4925												GGG					960
4926		СТА	гàг	Pne	Leu		Asp	GTÀ	GTA	cys		Gly	GTĀ	АТа	туг	_	
4927	305					310					315					320	
4928	<b>1</b> ma			mam	a	~~~	maa	a		. am	~~~	<b></b>			) ma	mma	1000
4929												TCG					1008
4930	тте	тте	тте	cys	_	GIU	cys	HIS	ser		Asp	Ser	Inr	Thr		Leu	
4931					325					330					335		
4932	~~~		~~~		~=~			~		~~~		~~=	~~.			-	3056
4933												GCT					1056
4934	_		_				_					Ala	-		_	Leu	
4935				340					345					350			
4936	~~~					~~=		~~=									1104
4937												GTC					1104
4938	val	val		Ala	Thr	Ala	Thr		Pro	СŢЪ	Ser	Val		Val	Pro	H1S	
4939			355					360					365				
4940	<b>a</b> .c						<b></b>					<b></b> -				-	
4941												GGA					1152
4942	Pro		ITe	GLu	GLu	Val		Leu	Ser	Asn	Thr	Gly	G⊥u	ITe	Pro	Pne	
4943		370					375					380					
4944																	
4945												GGG					1200
4946	_	GLy	Lys	Ala	Ile		Ile	Glu	Ala	Ile	_	Gly	Gly	Arg	His		
4947	385					390					395					400	

#### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999 TIME: 11:22:42

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4948				~ · ·										<b>-</b>			
4949					TCC												1248
4950	тте	Pne	cys	Hls	Ser	гàг	ьуs	гàг	cys	_	GIU	Leu	Ala	Ala		Leu	
4951					405					410					415		
4952	ma s	000	аша	<b>a</b> a.	3 ma		aam	ama.	~~~	m. m	m. 1. cr		~~~	ama	~ · m	ama	1006
4953 4954					ATC												1296
4954	ser	сту	Leu	_	Ile	ASN	АТа	vaı		Tyr	Tyr	arg	GTA		ASP	vaı	
4956				420					425					430			
4957	TICC	CTC	አመአ	CCA	ACT	N TO CO	CCA	axa	ama	Omm.	ama	ama	aa x	202	ava	COM	1244
4958					Thr												1344
4959	Ser	Val	435	FIO	1111	776	СГУ	440	VQI	νат	νат	Val	445	1111	ASP	ALG	
4960			433					110					443				
4961	СТС	AТG	ACG	GGC	TAT	ACG	GGC	GAC	ффф	GAC	тсδ	стс	ΔͲሮ	GAC	ጥርጥ	AAC	1392
4962					Tyr												1372
4963		450		1	- , -		455				201	460			0,0		
4964																	
4965	ACA	TGT	GTC	ACC	CAG	ACA	GTC	GAC	TTC	AGC	TTG	GAT	CCC	ACC	TTC	ACC	1440
4966					Gln												
4967	465	-				470		-			475	•				480	
4968																	
4969	ATT	GAG	ACG	ACG	ACC	GTG	CCT	CAA	GAC	GCA	GTG	TCG	CGC	TCG	CAG	CGG	1488
4970	Ile	Glu	Thr	Thr	Thr	Val	Pro	Gln	Asp	Ala	Val	Ser	Arg	Ser	Gln	Arg	
4971					485					490					495		
4972																	
4973					GGC												1536
4974	Arg	Gly	Arg		Gly	Arg	Gly	Arg		Gly	Ile	Tyr	Arg		Val	Thr	
4975				500					505					510			
4976	~~~	~~.															
4977					CCC												1584
4978 4979	Pro	GTĀ		Arg	Pro	ser	GTÀ		Pne	Asp	ser	ser		Leu	Cys	GLu	
4979			515					520					525				
4981	TCC	ጥልጥ	GAC	aca	GGC	መረመ	CCT	TCC	መልጣ	CAC	CITIC	3.00	aaa	aaa	CAC	A CC	1632
4982					Gly												1032
4983	<b>O J</b> D	530	no p	ALG	OLY	Cys	535	ııp	1 y 1	GIU	пеа	540	FIO	ATG	GIU	1111	
4984							•••					340					
4985	TCG	GTT	AGG	TTG	CGG	GCC	TAC	CTG	AAC	ACA	CCA	GGG	TTG	CCC	GTT	TGC	1680
4986					Arg												•
4987	545		_		_	550	•				555	-				560	
4988																	
4989					GAG												1728
4990	Gln	Asp	His	Leu	Glu	Phe	Trp	Glu	Ser	Val	Phe	Thr	Gly	Leu	Thr	His	
4991					565					570					575		
4992																	
4993					TTC												1776
4994	Ile	Asp	Ala		Phe	Leu	Ser	Gln		Lys	Gln	Ala	Gly	_	Asn	Phe	
4995				580					585					590			
4996	ac-	m » ~	ama	am.	965	m ~	~	~~~									
4997					GCA												1824
4998 4999	Pro	ryr		val	Ala	туr	GIN		ınr	vaı	cys	АТа	_	АТа	GIN	ATa	
			595					600					605				
5000																	

5053

### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

														71	T # 1/#1	onm c	1474
																	31474.raw
5001					TGG												1872
5002	Pro		Pro	Ser	Trp	Asp		Met	Trp	Lys	Cys		Ile	Arg	Leu	гàг	
5003		610					615					620					
5004																	·
5005					GGG												1920
5006	Pro	Thr	Leu	His	Gly	Pro	Thr	Pro	Leu	Leu	${ t Tyr}$	Arg	Leu	Gly	Ala		
5007	625					630					635					640	
5008																	
5009					ACC												1968
5010	Gln	Asn	Glu	Val	Thr	Leu	Thr	His	Pro	Ile	Thr	Lys	Tyr	Ile	Met	Ala	
5011					645					650					655		
5012														•			
5013	TGC	ATG	TCG	GCT	GAC	CTG	GAG	GTC	GTC	ACT							1998
5014	Cys	Met	Ser	Ala	Asp	Leu	Glu	Val	Val	Thr							
5015	_			660	_				665	4	(2)	INFO	RMAT	CON E	OR S	SEQ ID	NO:103:
5016																	
5017		(i	) SE(	QUEN	CE CH	IARAC	TER	CSTIC	cs:								
5018		•		_	ENGTE					rs							•
5019					PE:												
5020			-		rani												
5021			•		POL			-	,								
5022			, -	, -													
5023		(ii	MOI	LECUI	E T	PE:	CDNA	4									
5024		,	,					•									
5025																	
5026		(ix	. सम	ATURI	₹ :												
5027		,			AME/F	EY:	CDS										
5028			•	•	CAT			1998									
5029			\	J, <u>L</u> ,				.,,,									
5030																	
5031																	
5032		/vi	SEC	TIEN	CE DE	ומטפי	PTT	N	SEO '	TD NO	2 • 10 •	a •					
5032		(^-	, 5	ZODII.	wa			,,,,,	Jug .								
5034	ΔTG	aac	AGC	ACC	CAT	СУТ	СУТ	СУТ	СУТ	CAC	AGC	AGC	aac	СТС	GTG	CCG	48
5035					His												10
5036	1	GLY	561	Der	5	1113	1115	1115	1113	10	Der	Ser	GLY	пеа	15	110	
5037	-				3					10					13		
5037	ccc	aac	N.C.C	СУП	ATG	COT	ጥረጥ	CTT	Cimin	א יחיים	CITITE	COT	λĊΙλ	አጥጥ	ληνη	ע ידיידו	96
5039					Met												70
5040	AIG	СТУ	Ser	20	Met	СТУ	Ser	Val	25	TTE	νат	СТУ	ALG		TTE	neu	
				20					23					30			
5041 5042	mam	O O III	N CIM	ааш	AGT	» ma	100	aaa	шла	maa	71 A A	axa	200	aaa	aaa	США	144
																	144
5043 5044	ser	сту		стА	Ser	тте	TIIL		тÀц	Det.	GIII	GTII		Arg	GTÅ	Leu	
			35					40					45				
5045	amm	oom.	шаа	330	a ma	3 CIT	3.00	amm.	3.013	aaa	~~~	a 2 c	3 2 C	224	a 2 a	ama	100
5046					ATC												192
5047	ьeu		cys	ьys	Ile	Thr		ьeu	rnr	стĀ	arg		гÀг	ASN	GIN	vaı	
5048		50					55					60					
5049	a			~	a	a==	-	m~~		~~-			m~~	me ~	a=-	000	0.4.0
5050					CAG												240
5051		СŢУ	GLu	Val	Gln		Va⊥	Ser	Thr	Ala		GLn	Ser	Phe	Leu		
5052	65					70					75					80	

#### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

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5058 5059 5060 5061												CAG Gln						336
5062 5063 5064 5065						_						CCC Pro						384
5066 5067 5068 5069												TAC Tyr 140						432
5070 5071 5072 5073												GAC Asp						480
5074 5075 5076 5077												GGC Gly						528
5078 5079 5080 5081												ATC Ile						576
5082 5083 5084 5085												TTT Phe						624
5086 5087 5088 5089												ACG Thr 220						672
5090 5091 5092 5093												CAC His						720
5094 5095 5096 5097												GCA Ala						768
5098 5099 5100 5101												GCC Ala						816
5102 5103 5104 5105												GAC Asp						864
5106	ACT	GGG	GTA	AGG	ACC	ATT	ACC	ACA	GGC	GCC	CCC	GTC	ACA	TAC	TCT	ACC		912

### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

INPUT S	ET: S3	1474.raw
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5109																	
5110																GAC	960
5111	Tyr	Gly	Lys	Phe	Leu	Ala	Asp	Gly	Gly	Cys	Ser	Gly	Gly	Ala	Tyr		
5112	305					310					315					320	
5113									•								
5114					GAT												1008
5115	Ile	Ile	Ile	Cys	Asp	Glu	Cys	His	Ser	Thr	Asp	Ser	Thr	Thr	Ile	Leu	
5116					325					330					335		
5117																	
5118	GGC	ATC	GGC	ACA	GTC	CTG	GAC	CAA	GCG	GAG	ACG	GCT	GGA	GCG	CGG	CTT	1056
5119	Gly	Ile	Gly	Thr	Val	Leu	Asp	Gln	Ala	Glu	Thr	Ala	Gly	Ala	Arg	Leu	
5120				340					345					350			
5121																	
5122					ACC												1104
5123	Val	Val	Leu	Ala	Thr	Ala	Thr	Pro	Pro	Gly	Ser	Val	Thr	Val	Pro	His	
5124			355					360					365				
5125																	
5126	CCA	AAC	ATC	GAG	GAG	gtg	GCC	CTG	TCT	AAT	ACT	GGA	GAG	ATC	CCC	TTC	1152
5127	Pro	Asn	Ile	Glu	Glu	Val	Ala	Leu	Ser	Asn	Thr	Gly	Glu	Ile	Pro	Phe	
5128		370					375					380					
5129																	
5130	TAT	GGC	AAA	GCC	ATC	CCC	ATT	GAA	GCC	ATC	AGG	GGG	GGA	AGG	CAT	CTC	1200
5131	Tyr	Gly	Lys	Ala	Ile	Pro	Ile	Glu	Ala	Ile	Arg	Gly	Gly	Arg	His	Leu	
5132	385					390					395					400	
5133																	
5134	$\mathbf{ATT}$	TTC	TGT	CAT	TCC	AAG	AAG	AAG	TGC	GAC	GAG	CTC	GCC	GCA	AAG	CTG	1248
5135	Ile	Phe	Cys	His	Ser	Lys	Lys	Lys	Cys	Asp	Glu	Leu	Ala	Ala	Lys	Leu	
5136					405					410					415		
5137																	
5138					ATC												1296
5139	Ser	Gly	Leu	Gly	Ile	Asn	Ala	Val		Tyr	Tyr	Arg	Gly	Leu	Asp	Val	
5140				420					425					430			
5141																	
5142					ACT												1344
5143	Ser	Val		Pro	Thr	IIe	GTÀ	_	Val	Val	Val	Val		Thr	Asp	Ala	
5144			435					440					445				
5145																	
5146																	1392
5147	Leu		Thr	GTĀ	Tyr	Thr	_	Asp	Phe	Asp	Ser		IIe	Asp	Cys	Asn	
5148		450					455					460					
5149																	
5150					CAG												1440
5151		cys	vaı	Thr	Gln		val	Asp	Pne	ser		Asp	Pro	Thr	Pue		
5152	465					470					475					480	
5153		a		3.~~	. ~~	am-	-	a.,	a * ~	aa.	a=-	m.c	~~~	mc~	a	000	
5154					ACC												1488
5155	тте	GIU	Thr	Thr	Thr	val	Pro	GIn	Asp		val	ser	Arg	ser		arg	
5156					485					490					495		
5157		~~-													a=-		
5158					GGC												1536
5159	Arg	GTÀ	arg	Tnr	Gly	arg	стÀ	arg	arg	стĀ	тте	Tyr	Arg	Pue	vaı	rnr	

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

														IN	PUT	SET:	S31474.raw
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5161											•						
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5163	Pro	Gly	Glu	Arg	Pro	Ser	Gly	Met	Phe	Asp	Ser	Ser	Val	Leu	Cys	Glu	
5164			515					520					525		-		
5165																	
5166	TGC	TAT	GAC	GCG	GGC	TGT	GCT	TGG	TAC	GAG	CTC	ACC	CCC	GCC	GAG	ACC	1632
5167	Cys	Tyr	Asp	Ala	Gly	Cys	Ala	Trp	Tyr	Glu	Leu	Thr	Pro	Ala	Glu	Thr	
5168		530					535					540					
5169																	
5170	TCG	GTT	AGG	TTG	CGG	GCC	TAC	CTG	AAC	ACA	CCA	GGG	TTG	CCC	GTT	TGC	1680
5171	Ser	Val	Arg	Leu	Arg	Ala	Tyr	Leu	Asn	Thr	Pro	Gly	Leu	Pro	Val	Cys	
5172	545					550					555					560	
5173																	
5174											TTC						1728
5175	Gln	Asp	His	Leu	Glu	Phe	Trp	Glu	Ser	Val	Phe	Thr	Gly	Leu	Thr	His	
5176					565					570					575		
5177																	
5178											CAG						1776
5179	Ile	Asp	Ala	His	Phe	Leu	Ser	Gln		Lys	Gln	Ala	Gly	Asp	Asn	Phe	
5180				580					585					590			
5181																	
5182											TGC						1824
5183	Pro	Tyr	•	Val	Ala	Tyr	Gln		Thr	Val	Cys	Ala	Arg	Ala	Gln	Ala	
5184			595					600					605				
5185																	
5186											TGT						1872
5187	Pro		Pro	Ser	Trp	Asp		Met	Trp	Lys	Cys		Ile	Arg	Leu	Lys	
5188		610					615					620					
5189																	
5190											TAC						1920
5191		Thr	Leu	His	GTA		Thr	Pro	Leu	Leu	Tyr	Arg	Leu	Gly	Ala		
5192	625					630					635					640	
5193	<i>-</i>			~=~													
5194											ACC						1968
5195	GIN	Asn	GIU	vaı		Leu	Thr	HIS	Pro		Thr	Lys	Tyr	ITe		Ala	
5196					645					650					655		
5197	maa	3.00	maa	aam	a.a	ama	~~~	ama	ama	3 am							1000
5198					GAC						1						1998
5199 5200	Cys	мес			Asp	Leu	GIU	Val				CMEC	3143 M		30D (	780 T	D. WO. 104.
				660					663	٣	(2)	LNEOF	KMAT.	LON	OR :	SEO T	D NO:104:
5201		, :	, cm	OT HEIST	7D 01	***	aman :	r am r	<b>.</b>								
5202		(1			CE CH												
5203 5204					ENGTI YPE:					. 5							
5204 5205			•	•	rpe: Trani												
5205 5206					OPOLO				i T.								
5206			( )	רט די	) E O D (	JGI:	T T 110	=aT									
5207 5208		/ 4 4	) MO	יייסיי	LE TY	7DF.	CDM	λ									
5208 5209		( 11	, MO	reco.	ur Ti	.PC;	CDM	н.									
5210																	
5210																	
5211																	
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### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999 TIME: 11:22:44

INPUT SET: S31474.raw

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	5213		(ix)	FE!	ATURI	፤ :												
	5214			( )	A) NA	AME/F	KEY:	CDS										
	5215			(1	3) L(	CAT	ON:	1	1998									
	5216			•														
	5217						•											
>	5218		(xi)	SEC	OUEN	CE DE	ESCR	PTIC	ON: S	SEQ I	D NO	0:104	1:					
	5219		•	•						_								
	5220	ATG	GGC	AGC	AGC	CAT	CAT	CAT	CAT	CAT	CAC	AGC	AGC	GGC	CTG	GTG	CCG	48
	5221					His												
	5222	1	2			5					10					15		
	5223	_				_												
	5224	CGC	GGC	AGC	CAT	ATG	GGT	TCT	GTT	GTT	ATT	GTT	GGT	AGA	ATT	ATT	TTA	96
	5225					Met												
	5226	5	1		20		1			25			1	5	30			
	5227																	
	5228	тст	GGT	AGT	GGT	AGT	ATC	ACG	GCC	TAC	TCC	CAA	CAG	ACG	CGG	GGC	СТА	144
	5229					Ser												
	5230	501	017	35	0-7				40	- 7 -	501	<b></b>	<b></b>	45	9		200	
	5231			•					- •									
		ርጥጥ	COT	ጥርር	ልጥሮ	AAG	ΔСТ	AGC	CTT	ACA	aac	CGG	GAC	AAG	AAC	CAG	CTC	192
	5232					Lys												1,2
	5234	100	50	0,5	110	2,5		55	<b>LCG</b>		013	9	60	<b>L</b> y5		01	*41	
	5235		30					33					00					
	5236	GAG	CCA	GAG	CTT	CAG	стс	Стт	<b>שרכ</b> כ	ACC	CCA	λСλ	CAA	שככ	ጥጥር	CTG	CCC	240
	5237					Gln												240
	5238	65	OL y	014	*41	0111	70	var	DCI		ALU	75	0111	501	1110	пса	80	
	5239	03					,,					, 5					00	
	5240	A C C	ሞርር	CTC	አልሮ	GGC	стс	ጥረነጥ	TGG	ACC	CTT	ሞልሮ	СУТ	ССТ	CCT	aac	TCA	288
	5241					Gly												200
	5242	****	Cys	Vai	MO11	85	Val	Cys	11p	1111	90	ıyı	111.5	GLY	AIG	95	Ser	
	5242					0.5					30					73		
	5244	AAG	N.C.C	ጥጥል	GCC	GGC	CCA	λλG	ccc	CCA	איזיכי	A C C	CAG	አጥር	ጥልሮ	አርጥ	አአጥ	336
	5245					Gly												330
	5245	цуз	1111	пец	100	СТУ	110	цуз	GLY	105	116	1111	GIII	Mec	110	1111	ASII	
	5247				100					103					110			
	5248	стс	GAC	CAG	GAC	CTC	CTC	aac	таа	CAG	aca	מממ	מממ	aaa	aca	ССТ	ጥሮሮ	384
	5249					Leu												301
	5250	val	ADP	115	ASP	пеа	val	CTY	120	O±11	AIG	110	110	125	A.u	<b></b> 9	501	
	5251			110					120					125				
	5252	ጥጥር	ACA	CCA	TGC	ACC	ጥርጥ	GGC	AGC	ייר א	GAC	СФФ	ጥልሮ	ጥጥር	GTC	ACG	AGA	432
	5253					Thr												102
	5254	пса	130	110	Cyb	1111	Cyb	135	DCI	JCI	rop	пса	140	пса	·uı	****	9	
	5255		130					100					110					
	5256	САТ	GCT	GAC	GTC	ATT	CCG	стс	CGC	CGG	CGG	GGC	GAC	ΔСΤ	AGG	ggg	AGC	480
	5257					Ile												400
	5258	145	ALG	nop	***	110	150	vul	9	n. y	n. g	155	npp	501	9	017	160	
	5259	143					130					1,7,7					100	
	5260	ሮሞር	כידיכי	ጥሮሮ	מממ	AGG	ССТ	GTIC	ጥሮር	ጥልሮ	ጥጥረ	AAC	GGC	ጥርጥ	ጥሮር	GGT	GGT	528
	5261					Arg												320
	5262	neu	Leu		110	165	110	var	SCI	TAT	170	пуз	σту	261	Det	175	OT.	
	5263					100					± / U					1,5		
	5264	CCA	CTC	משמ	ሞርር	CCT	<b>דרכ</b>	aga	מאמ	ССТ	CTC	aga	ልሞሮ	ጥጥር	cec	ССП	CCC	576
	5265					Pro												576
	3403	PIO	ьeu	ьeu	Cys	PIO	Det.	стА	uis	MIG	vат	стА	тте	File	Arg	WIG	нта	

### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

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5266				180					185					190			
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5268	ДΤЪ	TGC	ACC	cgg	ggg	GTT	GCG	ΔAG	GCG	GTG	GAC	արդու	GTG	CCC	GTA	GAG	624
5269						Val											721
5270	Val	Cys	195	Arg	GLY	Val	ATG	200	AIG	Val	ASP	FILE	205	FIO	Val	014	
			193					200					203				
5271			~						~~~	ama.	-		~~~		ma.	maa	670
5272						ATG											672
5273	ser		GIU	Thr	Thr	Met	_	Ser	Pro	vaı	Pne		Asp	Asn	Ser	Ser	
5274		210					215					220					
5275																	
5276						CAG											720
5277	Pro	Pro	Ala	Val	Pro	Gln	Ser	Phe	Gln	Val	Ala	His	Leu	His	Ala		
5278	225					230					235					240	
5279																	
5280	ACT	GGC	AGC	GGC	AAG	AGT	ACT	AAA	GTG	CCG	GCT	GCA	TAT	GCA	GCC	CAA	768
5281	Thr	Gly	Ser	Gly	Lys	Ser	Thr	Lys	Val	Pro	Ala	Ala	Tyr	Ala	Ala	Gln	
5282					245					250					255		
5283																	
5284	GGG	TAC	AAG	GTG	CTC	GTC	CTC	AAT	CCG	TCC	GTT	GCC	GCT	ACC	TTA	GGG	816
5285	Glv	Tvr	Lvs	Val	Leu	Val	Leu	Asn	Pro	Ser	Val	Ala	Ala	Thr	Leu	Glv	
5286	-	-	-	260					265					270		-	
5287																	
5288	ጥጥጥ	GGG	GCG	ТΑТ	ATG	TCT	AAG	GCA	CAC	GGT	ΔͲͲ	GAC	ccc	AAC	ATC	AGA	864
5289						Ser											
5290	1 110	<b>0</b> ± <i>y</i>	275	- , -	1100	001	2,5	280	****	O _T			285			••• 9	
5291			2,5					200					200				
5292	አረጥ	ccc	CTLY	N.C.C	A C C	ATT	ACC	202	aaa	acc	ccc	GT/C	אמא	ጥልሮ	тст	A C C	912
5292																	912
5294	1111	_	Val	Arg	1111	Ile		TIIL	GTÅ	мта	PIO		1111	ıyı	Ser	IIII	
		290					295					300					
5295					amm	<b>a</b> aa	~	a a m	aam	maa	mam	aaa				a.a	0.00
5296						GCC											960
5297	_	GTĀ	гàг	Pne	Leu	Ala	Asp	GTĀ	GTĀ	cys		GTÄ	GTĀ	АТа	Tyr	_	
5298	305					310					315					320	
5299																	
5300						GAG											1008
5301	Ile	Ile	Ile	Cys	_	Glu	Cys	His	Ser		Asp	Ser	Thr	Thr		Leu	
5302					325					330					335		
5303																	
5304	GGC	ATC	GGC	ACA	GTC	CTG	GAC	CAA	GCG	GAG	ACG	GCT	GGA	GCG	CGG	CTT	1056
5305	Gly	Ile	Gly	Thr		Leu					Thr	Ala	Gly	Ala	Arg	Leu	
5306				340					345					350			
5307																	
5308	GTC	GTG	CTC	GCC	ACC	GCT	ACG	CCT	CCG	GGA	TCG	GTC	ACC	GTG	CCA	CAC	1104
5309	Val	Val	Leu	Ala	Thr	Ala	Thr	Pro	Pro	Gly	Ser	Val	Thr	Val	Pro	His	
5310			355					360		-			365				
5311																	
5312	CCA	AAC	ATC	GAG	GAG	GTG	GCC	CTG	TCT	ААТ	ACT	GGA	GAG	ATC	CCC	TTC	1152
5313						Val											<del>_</del>
5314		370					375				<b></b>	380					
5315		_ , 0					J , J										
5316	ጥልጥ	GGC	ΔΔΔ	GCC	ΔͲϹ	CCC	Δጥጥ	GVV	gee	ΔΨα	AGG	ggg	GGA	AGG	САТ	CTC	1200
5317						Pro											1200
5317	385	O L y	цys	n_a	7.T.C	390	TT6	JIU	тта	TT6	395	O _T y	СТУ	719	1113	400	
2210	202					3 9 0					373					400	

#### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999 TIME: 11:22:45

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5319																	10.0
5320 5321			TGT Cys														1248
5322 5323					405					410					415		
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5325	Ser	Gly	Leu	_	Ile	Asn	Ala	Val		Tyr	Tyr	Arg	Gly		Asp	Val	
5326 5327				420					425					430			
5328	TCC	GTC	ATA	CCA	ACT	ATC	GGA	GAC	GTC	GTT	GTC	GTG	GCA	ACA	GAC	GCT	1344
5329	Ser	Val	Ile	Pro	Thr	Ile	Gly	_	Val	Val	Val	Val		Thr	Asp	Ala	
5330 5331			435					440					445				
5331	CTG	ATG	ACG	GGC	TAT	ACG	GGC	GAC	ттт	GAC	TCA	GTG	ATC	GAC	TGT	AAC	1392
5333			Thr														
5334		450					455					460					
5335 5336	አረን	መረመ	GTC	N C C	CAC	7 C 7	CTC.	GAC	ጥጥረ	) CC	መመር	CAT	ccc	A C C	ጥጥረ	ACC.	1440
5337			Val														1440
5338	465	-1-				470					475					480	
5339																	
5340			ACG														1488
5341 5342	тте	GIU	Thr	THE	485	vaı	PIO	GIN	ASP	490	Val	261	AIG	Ser	495	Arg	
5343					100					1,0					1,0		
5344			AGG														1536
5345	Arg	Gly	Arg		Gly	Arg	Gly	Arg	_	Gly	Ile	Tyr	Arg		Val	Thr	
5346 5347				500					505					510			
5348	CCG	GGA	GAA	CGG	ccc	TCG	GGC	ATG	TTC	GAT	TCC	TCG	GTC	CTG	TGT	GAG	1584
5349			Glu														
5350			515					520			•		525				
5351 5352	TCC	ጥልጥ	GAC	acc	ccc	ጥረጥ	CCT	TGG	ሞልሮ	GNG	СТС	N.C.C	ccc	GCC	GAG	<b>ACC</b>	1632
5352			Asp														1032
5354	-	530	-		-	•	535	•	•			540					
5355																	
5356 5357			AGG Arg														1680
5358	545	Val	Arg	Leu	Arg	550	ıyı	Leu	Maii	1111	555	СТУ	Leu	FIO	VGI	560	
5359																	
5360			CAC														1728
5361	Gln	Asp	His	Leu		Phe	Trp	Glu	Ser		Phe	Thr	Gly	Leu	Thr 575	His	
5362 5363					56 <b>5</b>					570					3/3		
5364	ATA	GAT	GCA	CAC	TTC	TTG	TCC	CAG	ACC	AAG	CAG	GCA	GGA	GAC	AAC	TTC	1776
5365			Ala	His					Thr					Asp			
5366				580					585					590			
5367 5368	מממ	ጥልሮ	CTG	СШУ	GC A	ጥአሮ	ראא	GCC	እሮር	ama	ጥርረር	מככ	<b>A</b> GG	GCT	CAG	GCC	1824
5369			Leu														1024
5370		<b>4</b> -	595			<b>4</b> -		600		· -	4		605				
5371					•												

#### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999

TIME: 11:22:45 INPUT SET: S31474, raw 5372 CCA CCT CCA TCA TGG GAT CAA ATG TGG AAG TGT CTC ATA CGG CTG AAA 5373 Pro Pro Pro Ser Trp Asp Gln Met Trp Lys Cys Leu Ile Arg Leu Lys CCT ACG CTG CAC GGG CCA ACA CCC TTG CTG TAC AGG CTG GGA GCC GTC Pro Thr Leu His Gly Pro Thr Pro Leu Leu Tyr Arg Leu Gly Ala Val Gln Asn Glu Val Thr Leu Thr His Pro Ile Thr Lys Tyr Ile Met Ala TGC ATG TCG GCT GAC CTG GAG GTC GTC ACT 5385 Cys Met Ser Ala Asp Leu Glu Val Val Thr/ 665 (2) INFORMATION FOR SEQ ID NO:105: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 1998 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: cDNA (ix) FEATURE: (A) NAME/KEY: CDS (B) LOCATION: 1..1998 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:105: ATG GGC AGC CAT CAT CAT CAT CAT CAC AGC AGC GGC CTG GTG CCG Met Gly Ser Ser His His His His His Ser Ser Gly Leu Val Pro CGC GGC AGC CAT ATG GGT TCT GTT GTT ATT GTT GGT AGA ATT ATT TTA Arg Gly Ser His Met Gly Ser Val Val Ile Val Gly Arg Ile Ile Leu TCT GGT AGT GGT AGT ATC ACG GCC TAC TCC CAA CAG ACG CGG GGC CTA Ser Gly Ser Gly Ser Ile Thr Ala Tyr Ser Gln Gln Thr Arg Gly Leu 5417 CTT GGT TGC AAG AAG ACT AGC CTT ACA GGC CGG GAC AAG AAC CAG GTC Leu Gly Cys Lys Lys Thr Ser Leu Thr Gly Arg Asp Lys Asn Gln Val GAG GGA GAG GTT CAG GTG GTT TCC ACC GCA ACA CAA TCC TTC CTG GCG 

Glu Gly Glu Val Gln Val Ser Thr Ala Thr Gln Ser Phe Leu Ala

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

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5429 5430 5431 5432								GGG Gly									336
5433 5434 5435 5436								TGG Trp 120									384
5437 5438 5439 5440								AGC Ser									432
5441 5442 /5443 5444								CGC Arg									480
5445 5446 5447 5448								TCC Ser									528
5449 5450 5451 5452								CAC His									576
5453 5454 5455 5456								AAG Lys 200									624
5457 5458 5459 5460								TCT Ser									672
5461 5462 5463 5464								TTT Phe									720
5465 5466 5467 5468								AAA Lys									768
5469 5470 5471 5472								AAT Asn									816
5473 5474 5475 5476								GCA Ala 280									864
5477	ACT	GGG	GTA	AGG	ACC	ATT	ACC	ACA	GGC	GCC	CCC	GTC	ACA	TAC	TCT	ACC	912

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

														IN	<b>IPUT</b>	SET:	S31474.raw
5478 5479 5480	Thr	Gly 290	Val	Arg	Thr	Ile	Thr 295	Thr	Gly	Ala	Pro	Val 300	Thr				
5481	TAT	GGC	AAG	TTT	CTT	GCC	GAT	GGT	GGT	TGC	TCT	GGG	GGC	GCT	TAT	GAC	960
5482	Tyr	Gly	Lys	Phe	Leu	Ala	Asp	Gly	Gly	Cys	Ser	Gly	Gly	Ala	Tyr	Asp	
5483	305	_	-			310	_	_	_	-	315	_	_			320	
5484																	
5485	ATC	ATA	ATA	TGT	GAT	GAG	TGC	CAT	TCA	ACT	GAC	TCG	ACT	ACA	ATC	TTG	1008
5486	Ile	Ile	Ile	Cys	Asp	Glu	Cys	His	Ser	Thr	Asp	Ser	Thr	Thr	Ile	Leu	
5487					325					330					335		
5488																	
5489						CTG											1056
5490	Gly	Ile	Gly		Val	Leu	Asp	Gln		Glu	Thr	Ala	Gly		Arg	Leu	
5491				340					345					350			
5492																	
5493						GCT											1104
5494	Val	Val		Ala	Thr	Ala	Thr		Pro	GTA	Ser	Val		Val	Pro	His	
5495			355					360					365				
5496 5497	aas	330	ъ пт	030	<b>a</b> • •	ama	aaa	аша	mam	2 2 00	» am	003	030	» ma	aaa	mma	1150
						GTG											1152
5498 5499	Pro	370	TIE	GIU	GIU	Val	375	Leu	ser	ASII	Thr	380	GIU	тте	PIO	Pne	
5500		3/0					3/3					300					
5501	ጥልጥ	aac	ΔΔΔ	acc	ልጥሮ	ccc	א חיחי	GAA	GCC	ልጥሮ	AGG	GGG	GGA	N.C.C	СУП	מיזים	1200
5502						Pro											1200
5503	385	0-1	-,-			390		<b>01</b> u			395	011	O-1	9		400	
5504																	
5505	ATT	TTC	TGT	CAT	TCC	AAG	AAG	AAG	TGC	GAC	GAG	CTC	GCC	GCA	AAG	CTG	1248
5506						Lys											
5507			•		405	•	-	-	-	410					415		
5508																	
5509	TCA	GGC	CTC	GGA	ATC	AAC	GCT	GTG	GCG	TAT	TAC	CGG	GGG	CTC	GAT	GTG	1296
5510	Ser	Gly	Leu	Gly	Ile	Asn	Ala	Val	Ala	Tyr	Tyr	Arg	Gly	Leu	Asp	Val	
5511				420					425					430			
5512																	
5513						ATC											1344
5514	Ser	Val		Pro	Thr	Ile	Gly	Asp	Val	Val	Val	Val	Ala	Thr	Asp	Ala	
5515			435					440					445				
5516																	
5517						ACG											1392
5518	Leu		Thr	GTÀ	Tyr	Thr	_	Asp	Phe	Asp	Ser		Ile	Asp	Cys	Asn	
5519		450					455					460					
5520	3.03	man	ama	3.00	a » a	303	аша	~~~	mma	100	mma	~ m	000	100	mma	3.00	1440
5521						ACA											1440
5522 5523		cys	vaı	Thr	GIN	Thr	vaı	Asp	Pne	Ser		Asp	Pro	Thr	Pne		
5523 5524	465					470					475					480	
5525	V unus	GAC	N.C.C	N C C	אממ	GTG	CCT	מאט	GAG	CCA	CITIC!	TOO	aaa	TOO	CAC	ccc	1488
5525						Val											1400
5527	TIG	GIU	1111	1111	485	AGT	FIO	GIH	voħ	490	۷ат	⊃€1	Ar y	PET	495	AL 9	
5528					703					<del>4</del> 20					ユシン		
5529	CGG	GGT	AGG	ACT	GGC	AGG	GGT	AGG	AGA	GGC	АТС	TAC	AGG	ተጥተ	GTG	ACT	1536
5530						Arg											1000
	3	- 1	3		1	3	3	3		1		- 1 -	3				

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

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5536																	
5537						TGT											1632
5538	Cys	_	Asp	Ala	GTÀ	Cys		Trp	Tyr	GLu	Leu		Pro	Ala	GLu	Thr	
5539		530					535					540					
5540																	
5541						GCC											1680
5542		vaı	Arg	Leu	arg	Ala	Tyr	Leu	Asn	Thr		СТĀ	Leu	Pro	vaı	_	
5543	545					550					555					560	
5544	~~~	~.~	~~~		~~~			~ . ~								a	1700
5545						TTC											1728
5546	GIN	Asp	HIS	Leu		Phe	Trp	GTU	ser		Pne	Thr	GTĀ	Leu		HIS	
5547					565		•			570					575		
5548		~ · ·	~~	a. a	mma		maa	~~~			a. a		~~>	a		mma	1776
5549						TTG											1776
5550	тте	ASP	АТа		Pne	Leu	ser	GIN		гÀг	GIN	АТа	GTĀ	-	Asn	Pne	
5551				580					585					590			
5552	222	ma a	ama	OM N	003	ma a	<b>a.</b> .	000	100	ama	maa	000	3.00	aam	<b>a.</b> a	000	1004
5553						TAC											1824
5554 5555	Pro	Tyr		var	Ата	Tyr	GIN		Thr	vaı	cys	АТА	_	АТА	GIN	Ата	
			595					600					605				
5556	aa s	ааш	aax	шал	maa	GAT	<b>CIA</b> 8	N III CI	шаа	220	mam	аша	3013	000	ama		1872
5557 5558																	1872
5559	PIO	610	PIO	ser	тър	Asp		мес	тъ	гуѕ	Cys		тте	Arg	Leu	гуѕ	
5560		910					615					620					
5561	ССТ	) CC	cmc	CAC	ccc	CCA	אמא	ccc	mm/G	CTC	TIA CI	NCC	CTC	CCA	acc	CTC	1920
5562						Pro											1920
5563	625	1111	пеа	1113	O _T y	630	1111	FIO	пец	пец	635	Arg	пец	СТУ	AIG	640	
5564	023					030					033					040	
5565	CAA	αат	GAG	GTC	ACC	CTC	ACC	CAC	CCC	ΔΤΔ	ACC	ΔΔΔ	TAC	ΔТС	ΔTG	GCA	1968
5566						Leu											1,00
5567	01	*****	014	, 41	645	пса		****		650		<b>1</b> ,5	- 1 -		655	niu	
5568					0.10					000							
5569	TGC	ATG	TCG	GCT	GAC	CTG	GAG	GTC	GTC	ACT							1998
5570						Leu											
5571	- 2			660	<u>-</u>				665			INFOI	RMAT:	ION I	FOR S	SEO II	NO:106:
5572											. – , -					- <u>-</u> -	
5573		(i	SEC	OUEN	CE CE	HARAC	TER	STI	:S:								
5574		, -				1: 19				s							
5575						nuc											
5576						DEDNE											
5577						OGY:			•								
5578			,	,													
5579		(ii	) MOI	LECUI	E T	YPE:	cDN2	A									
5580		- '															
5581																	
5582																	
5583		(ix	) FEA	ATUR	፤:												

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#### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

TIME: 11:22:46

DATE: 04/15/1999

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	5585			(1	B) L(	CAT:	ON:	1	1998									
	5586																	
	5587																	
>	5588		(xi	) SE(	QUEN	CE DI	ESCR:	[PTI	ON:	SEQ :	ID NO	):10	5:					
	5589																	
	5590										CAC							48
	5591	_	GTA	Ser	Ser	_	His	His	His	His	His	Ser	Ser	СТĀ	Leu		Pro	
	5592	1				5					10					15		
	5593	aaa	aaa	3.00	CI A ITI	a ma	aam	mam	amm	amm	ATT	amm	аат	202	s mm	a mm	mm »	0.0
	5594 5595							-			Ile					-		96
	5596	AIG	GIY	Ser	20	Mec	сту	Set	val	25	TTG	vaı	GLY	Arg	30	TTE	Leu	
	5597				20					2,3					30			
	5598	тст	GGT	ΔСТ	сст	ΔСТ	ΔТС	ACG	GCC	ТΔС	TCC	CAA	CAG	ΔCG	CGG	GGC	СПУ	144
	5599										Ser							
	5600		1	35	~ <b>_</b>				40	- ]				45	5	1		
	5601																	
	5602	CTT	GGT	TGC	ATC	ATC	ACT	AGC	CTT	ACA	GGC	CGG	GAC	AAG	AAC	CAG	GTC	192
	5603										Gly							
	5604		50	_				55			-		60	-				
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	5607	Glu	Gly	Glu	Val	Gln	Val	Val	Ser	Thr	Ala	Thr	Gln	Ser	Phe	Leu	Ala	
	5608	65					70					75					80	
	5609																	
	5610										GTT							288
	5611	Thr	Cys	Val	Asn		Val	Cys	Trp	Thr	Val	Tyr	His	GTA	Ala		Ser	
	5612					85					90					95		
	5613	220	3.00	mm x	aaa	000	<b>aa</b> .		aaa	003	3.00	3.00	a.a	N MC	m > 0	3 CM	3 3 M	226
	5614 5615										ATC Ile							336
	5616	гуѕ	TILL	Leu	100	сту	PIO	rys	GTA	105	тте	THE	GIII	мес	110	THE	ASII	
	5617				100					103					110			
	5618	GTG	GAC	CAG	GAC	СТС	GTC	GGC	TGG	CAG	GCG	כככ	כככ	ggg	GCG	ССТ	TCC	384
	5619										Ala							501
	5620			115				1	120					125		3		
	5621																	
	5622	TTG	ACA	CCA	TGC	ACC	TGT	GGC	AGC	TCA	GAC	CTT	TAC	TTG	GTC	ACG	AGA	432
	5623	Leu	Thr	Pro	Cys	Thr	Cys	Gly	Ser	Ser	Asp	Leu	Tyr	Leu	Val	Thr	Arg	
	5624		130					135					140					
	5625																	
	5626										CGG							480
	5627	His	Ala	Asp	Val	Ile	Pro	Val	Arg	Arg	Arg	Gly	Asp	Ser	Arg	Gly	Ser	
	5628	145					150					155					160	
	5629												<b></b>			<b></b>		
	5630										TTG							528
	5631	Leu	Leu	Ser	Pro	_	Pro	Val	Ser	Tyr	Leu	Lys	GТÀ	Ser	Ala	-	GTÀ	
	5632					165					170					175		
	5633	002	ama	ama	maa	aam	шаа	000	a. a	a a m	ama	~~~	a ma	mm~	000	aam.	aaa	536
	5634 5635										GTG Val							576
	5636	F10	пeл	пeп	180		Set	стА	пта	185		стА	тте	rii6	190	WIG	ATG	*

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#### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999 TIME: 11:22:47

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5637	am.	maa	100	000	000	amm	~~~		-	ama	~~~		ama	~~~	am.	ara	604
5638 5639					GGG Gly												624
5640	Val	Cys	195	ALG	СТУ	val	Ата	200	АТА	Val	ASP	rne	205	PIQ	vaı	GIU	
5641			1),					200					203				
5642	TCC	ΔТС	GAA	ΔСΤ	ACT	ΔͲሮ	caa	ጥረጥ	ccc	CTC	ጥጥር	<b>ACG</b>	GAC	አልሮ	ጥሮል	ጥሮሮ	672
5643					Thr												072
5644	DCI	210	014			1100	215	501	110	• • •	1110	220	nop		501	501	
5645																	
5646	ccc	CCG	GCC	GTA	CCG	CAG	TCA	ттт	CAA	GTG	GCC	CAC	CTA	CAC	GCT	CCC	720
5647					Pro												•
5648	225					230					235					240	
5649																	
5650	ACT	GGC	AGC	GGC	AAG	AGT	ACT	AAA	GTG	CCG	GCT	GCA	TAT	GCA	GCC	CAA	768
5651	Thr	Gly	Ser	Gly	Lys	Ser	Thr	Lys	Val	Pro	Ala	Ala	Tyr	Ala	Ala	Gln	
5652		_		_	245			_		250			_		255		
5653																	
5654					CTC												816
5655	Gly	Tyr	Lys	Val	Leu	Val	Leu	Asn	Pro	Ser	Val	Ala	Ala	Thr	Leu	Gly	
5656				260					265					270			
5657																	
5658					ATG												864
5659	Phe	Gly		Tyr	Met	Ser	Lys		His	Gly	Ile	Asp		Asn	Ile	Arg	
5660			275					280					285				
5661		~~~	~														
5662					ACC												912
5663 5664	THE	_	var	arg	Thr	тте		Thr	сту	АТа	Pro		Thr	туг	ser	Thr	
5665		290					295					300					
5666	ጥለጥ	aac	λλŒ	արդու	CTT	ccc	CAT	CCT	CCT	ሞርር	ጥረጥ	aaa	aaa	CCT	יית אייי	GAC	960
5667					Leu												200
5668	305	<b>-</b> 1	-,-		204	310	пор	<b>0</b> ±3	<b>4</b> - <i>y</i>	0,5	315	013	<u></u>		- ] -	320	
5669											010					020	
5670	ATC	АТА	ATA	TGT	GAT	GAG	TGC	CAT	TCA	ACT	GAC	TCG	ACT	ACA	ATC	TTG	1008
5671					Asp												
5672				-	325		-			330	-				335		
5673																	
5674	GGC	ATC	GGC	ACA	GTC	CTG	GAC	CAA	GCG	GAG	ACG	GCT	GGA	GCG	CGG	CTT	1056
5675	Gly	Ile	Gly	Thr	Val	Leu	Asp	Gln	Ala	Glu	Thr	Ala	Gly	Ala	Arg	Leu	
5676				340					345					350			
5677																	
5678					ACC												1104
5679	Val	Val		Ala	Thr	Ala	Thr		Pro	Gly	Ser	Val		Val	Pro	His	
5680	·		355					360					365				
5681	003	330	3 E2 C	~~	~~	ama.	~~~	am~	mar		3.00	aa.	a	3 m~	acc	mma	1150
5682 5683					GAG												1152
5684	PIO	370	тте	GIU	Glu	νат	375	ьец	ser.	ASN	THE	-	GIU	тте	PIO	Fne	
5685		3/0					3/3					380					
5686	ጥልጥ	GGC	ΔΔΔ	GCC	ATC	כככ	עיייע	GAA	GCC	ΔͲሮ	ΔGG	aga	GGA	ΔGG	СУТ	ርጥር	1200
5687					Ile												1200
5688	385	1	-1-			390					395	1	1	3		400	
5689																	

#### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

														73	7 EN E 7/EN	CIDAR.	C21474
5600	3 MM	mma	mam	a					maa	a. a	a.a	аша	~~~				S31474.raw
5690 5691						AAG Lys											1248
5692	TTG	rne	Cys	urs	405	цуs	цуз	цуз	Cys	410	GIU	пеп	АТа	Ата	415	пеа	
5693					403					410					415		
5694	TCA	GGC	מיזיט	GGA	ልጥሮ	AAC	CCT	GTG	aca	ጥልጥ	TAC	caa	aga	כידיכי	САТ	GTG	1296
5695						Asn											1270
5696	501	U-1		420					425	- , -	- ] -	9	1	430			
5697																	
5698	TCC	GTC	АТА	CCA	ACT	ATC	GGA	GAC	GTC	GTT	GTC	GTG	GCA	ACA	GAC	GCT	1344
5699						Ile											
5700			435				4	440					445		•		
5701																	
5702	CTG	ATG	ACG	GGC	TAT	ACG	GGC	GAC	TTT	GAC	TCA	GTG	ATC	GAC	TGT	AAC	1392
5703	Leu	Met	Thr	Gly	Tyr	Thr	Gly	Asp	Phe	Asp	Ser	Val	Ile	Asp	Cys	Asn	
5704		450					455					460					
5705																	
5706						ACA											1440
5707	Thr	Cys	Val	Thr	Gln	Thr	Val	Asp	Phe	Ser	Leu	Asp	Pro	Thr	Phe		
5708	465					470					475					480	
5709																	
5710						GTG											1488
5711	IIe	GIU	Thr	Thr		Val	Pro	GIN	Asp		vaı	Ser	Arg	ser		arg	
5712					485					490					495		
5713 5714	aaa	o o m	» aa	3 CITT	aaa	3.00	aam	200	202	aaa	N MCI	mag	3.00	мшш	ama	мош	1536
5714 5715						AGG Arg											1536
5715 5716	Arg	сту	Arg	500	СТУ	Arg	GLY	Arg	505	GLY	116	TÀT	AIG	510	Val	1111	
5717				300					303					310			
5718	CCG	GGA	GAA	CGG	CCC	TCG	GGC	ΔTG	ጥጥር	САТ	ጥሮሮ	TCG	GTC	СТС	тст	GAG	1584
5719						Ser											1001
5720		,	515	9			1	520		<u>.</u>			525		- 1		
5721																	
5722	TGC	TAT	GAC	GCG	GGC	TGT	GCT	TGG	TAC	GAG	CTC	ACC	CCC	GCC	GAG	ACC	1632
5723	Cys	Tyr	Asp	Ala	Gly	Cys	Ala	Trp	Tyr	Glu	Leu	Thr	Pro	Ala	Glu	Thr	
5724		530			-		535		_			540	•				
5725																	
5726	TCG	GTT	AGG	TTG	CGG	GCC	TAC	CTG	AAC	ACA	CCA	GGG	TTG	CCC	GTT	TGC	1680
5727	Ser	Val	Arg	Leu	Arg	Ala	Tyr	Leu	Asn	Thr	Pro	Gly	Leu	Pro	Val	Cys	
5728	545					550					555					560	
5729																	
5730						TTC											1728
5731	GIN	Asp	His	Leu		Phe	Trp	GIU	Ser		Phe	Thr	СТÄ	Leu		His	
5732					565					570					575		
5733 5734	аша	C A TI	COA	a a a	mma	mma	шаа	a.a	3.00	330	ana	003	001	ana	220	mma	1776
5734 5735						TTG Leu											1776
5735 5736	TTE	wah	WTQ	580	LIIE	пeп	per	OTII	585	пур	OTII	WIG	стХ	590	HOII	FIIE	
5737				200					505					590			
5738	daa	ጥልሮ	стс	СπΣ	GCA	TAC	CAA	GCC	ACG	GTG	ፐርር	GCC	AGG	GCT	CAG	GCC	1824
5739						Tyr											1024
5740		-1-	595			- <b>] -</b>		600			- 1		605				
5741																	
5742	CCA	CCT	CCA	TCA	TGG	GAT	CAA	ATG	TGG	AAG	TGT	CTC	ATA	CGG	CTG	AAA	1872

#### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

														IΛ	<i>PUT</i>	SET: S	31474.raw
5743	Pro	Pro	Pro	Ser	Trp	Asp	Gln	Met	Trp	Lys	Cys	Leu	Ile	Arg	Leu	Lys	
5744		610				_	615			_	_	620					
5745																	
5746	CCT	ACG	CTG	CAC	GGG	CCA	ACA	CCC	TTG	CTG	TAC	AGG	CTG	GGA	GCC	GTC	1920
5747	Pro	Thr	Leu	His	Gly	Pro	Thr	Pro	Leu	Leu	Tyr	Arg	Leu	Gly	Ala	Val	
5748	625					630					635					640	
5749																	
5750	CAA	AAT.	GAG	GTC	ACC	CTC	ACC	CAC	CCC	ATA	ACC	AAA	TAC	ATC	ATG	GCA	1968
5751	Gln	Asn	Glu	Val	Thr	Leu	Thr	His	Pro	Ile	Thr	Lys	Tyr	Ile	Met	Ala	
5752					645					650					655		
5753																	
5754								GTC			,						1998
5755	Cys	Met	Ser	Ala	Asp	Leu	Glu	Val	Val	Thr						÷	
5756				660					665	0	(2)	INFO	TAMS	ON E	OR S	SEQ I	D NO:107:
5757																	
5758		(i)	SE	QUEN	CE CF	HARAC	CTER.	ISTIC	CS:								
5759								oase		rs							
5760			. (1	3) T	PE:	nuc]	leic	acio	3								
5761								sing	gle								
5762			(1	D) T(	POL	OGY:	line	ear									
5763																	
5764		(ii)	MO	LECUI	E T	PE:	CDN	A									
5765																	
5766																	
5767		(ix)	) FE	ATURI	E :												
5768			•	•	AME/F												
5769			(1	3) L(	CAT	con:	1	1998									
5770																	
5771																	
5772																	
5773		(xi)	) SE(	QUEN	CE DE	ESCR!	[PTI	ON: S	SEQ I	ID NO	):107	7:					
5774																	
5775																	
												AGC					48
5776	Met				His					His		AGC Ser			Val		48
5 <b>7</b> 77																	48
5777 5778	Met 1	Gly	Ser	Ser	His 5	His	His	His	His	His 10	Ser	Ser	Gly	Leu	Val 15	Pro	
5777 5778 5779	Met 1 CGC	Gly GGC	Ser AGC	Ser	His 5 ATG	His GGT	His TCT	His GTT	His GTT	His 10 ATT	Ser GTT	Ser GGT	Gly AGA	Leu ATT	Val 15 ATT	Pro TTA	<b>48</b> 96
5777 5778 5779 5780	Met 1 CGC	Gly GGC	Ser AGC	Ser CAT His	His 5 ATG	His GGT	His TCT	His GTT	His GTT Val	His 10 ATT	Ser GTT	Ser	Gly AGA	Leu ATT Ile	Val 15 ATT	Pro TTA	
5777 5778 5779 5780 5781	Met 1 CGC	Gly GGC	Ser AGC	Ser	His 5 ATG	His GGT	His TCT	His GTT	His GTT	His 10 ATT	Ser GTT	Ser GGT	Gly AGA	Leu ATT	Val 15 ATT	Pro TTA	
5777 5778 5779 5780 5781 5782	Met 1 CGC Arg	Gly GGC Gly	Ser AGC Ser	CAT His 20	His 5 ATG Met	His GGT Gly	His TCT Ser	His GTT Val	His GTT Val 25	His 10 ATT Ile	Ser GTT Val	Ser GGT Gly	Gly AGA Arg	ATT Ile 30	Val 15 ATT Ile	Pro TTA Leu	96
5777 5778 5779 5780 5781 5782 5783	Met 1 CGC Arg	Gly GGC Gly GGT	Ser AGC Ser	CAT His 20 GGT	His 5 ATG Met	His GGT Gly ATC	TCT Ser	His GTT Val	His GTT Val 25 TAC	His 10 ATT Ile	Ser GTT Val	Ser GGT Gly CAG	Gly AGA Arg ACG	ATT Ile 30	Val 15 ATT Ile	Pro TTA Leu CTA	
5777 5778 5779 5780 5781 5782 5783 5784	Met 1 CGC Arg	Gly GGC Gly GGT	AGC Ser AGT Ser	CAT His 20 GGT	His 5 ATG Met	His GGT Gly ATC	TCT Ser	GTT Val	His GTT Val 25 TAC	His 10 ATT Ile	Ser GTT Val	Ser GGT Gly	Gly AGA Arg ACG Thr	ATT Ile 30	Val 15 ATT Ile	Pro TTA Leu CTA	96
5777 5778 5779 5780 5781 5782 5783 5784 5785	Met 1 CGC Arg	Gly GGC Gly GGT	Ser AGC Ser	CAT His 20 GGT	His 5 ATG Met	His GGT Gly ATC	TCT Ser	His GTT Val	His GTT Val 25 TAC	His 10 ATT Ile	Ser GTT Val	Ser GGT Gly CAG	Gly AGA Arg ACG	ATT Ile 30	Val 15 ATT Ile	Pro TTA Leu CTA	96
5777 5778 5779 5780 5781 5782 5783 5784 5785 5786	Met 1 CGC Arg TCT Ser	Gly GGC Gly GGT Gly	AGC Ser AGT Ser 35	CAT His 20 GGT Gly	His 5 ATG Met AGT Ser	GGT Gly ATC Ile	TCT Ser ACG Thr	GTT Val	His GTT Val 25 TAC Tyr	His 10 ATT Ile TCC Ser	Ser GTT Val CAA Gln	GGT Gly CAG Gln	Gly AGA Arg ACG Thr 45	ATT Ile 30 CGG Arg	Val 15 ATT Ile GGC Gly	TTA Leu CTA Leu	96
5777 5778 5779 5780 5781 5782 5783 5784 5785 5786 5787	Met 1 CGC Arg TCT Ser	GGC Gly GGT GGT	AGC Ser AGT Ser 35	CAT His 20 GGT Gly	His 5 ATG Met AGT Ser	GGT Gly ATC Ile	TCT Ser ACG Thr	GTT Val GCC Ala 40 CTT	His GTT Val 25 TAC Tyr	His 10 ATT Ile TCC Ser	GTT Val CAA Gln	GGT Gly CAG Gln	AGA Arg ACG Thr 45	ATT Ile 30 CGG Arg	Val 15 ATT Ile GGC Gly	TTA Leu CTA Leu	96
5777 5778 5779 5780 5781 5782 5783 5784 5785 5786 5787	Met 1 CGC Arg TCT Ser	GGC Gly GGT GGT Gly	AGC Ser AGT Ser 35	CAT His 20 GGT Gly	His 5 ATG Met AGT Ser	GGT Gly ATC Ile	TCT Ser ACG Thr	GTT Val GCC Ala 40 CTT	His GTT Val 25 TAC Tyr	His 10 ATT Ile TCC Ser	GTT Val CAA Gln	GGT Gly CAG Gln GAC Asp	AGA Arg ACG Thr 45	ATT Ile 30 CGG Arg	Val 15 ATT Ile GGC Gly	TTA Leu CTA Leu	96
5777 5778 5779 5780 5781 5782 5783 5784 5785 5786 5787 5788	Met 1 CGC Arg TCT Ser	GGC Gly GGT GGT	AGC Ser AGT Ser 35	CAT His 20 GGT Gly	His 5 ATG Met AGT Ser	GGT Gly ATC Ile	TCT Ser ACG Thr	GTT Val GCC Ala 40 CTT	His GTT Val 25 TAC Tyr	His 10 ATT Ile TCC Ser	GTT Val CAA Gln	GGT Gly CAG Gln	AGA Arg ACG Thr 45	ATT Ile 30 CGG Arg	Val 15 ATT Ile GGC Gly	TTA Leu CTA Leu	96
5777 5778 5779 5780 5781 5782 5783 5784 5785 5786 5787 5788 5788	Met 1 CGC Arg TCT Ser CTT Leu	GGC Gly GGT Gly GGT Gly 50	AGC Ser AGT Ser 35 TGC Cys	CAT His 20 GGT Gly AAG Lys	His 5 ATG Met AGT Ser ATC Ile	GGT Gly ATC Ile ACT Thr	TCT Ser ACG Thr AGC Ser 55	GCC Ala 40 CTT Leu	His GTT Val 25 TAC Tyr ACA Thr	His 10 ATT Ile TCC ser GGC Gly	GTT Val CAA Gln CGG Arg	GGT Gly CAG Gln GAC Asp 60	AGA Arg ACG Thr 45 AAG Lys	ATT Ile 30 CGG Arg AAC	Val 15 ATT Ile GGC Gly CAG	TTA Leu CTA Leu GTC Val	96 . 144 192
5777 5778 5779 5780 5781 5782 5783 5784 5785 5786 5787 5788 5788 5790 5791	Met 1 CGC Arg TCT Ser CTT Leu GAG	GGC Gly GGT Gly 50 GGA	AGC Ser AGT Ser 35 TGC Cys	CAT His 20 GGT Gly AAG Lys	His 5 ATG Met AGT Ser ATC Ile	GGT Gly ATC lle ACT Thr	TCT Ser ACG Thr AGC Ser 55	GCC Ala 40 CTT Leu	His GTT Val 25 TAC Tyr ACA Thr	His 10 ATT Ile TCC ser GGC Gly	GTT Val CAA Gln CGG Arg	GGT Gly CAG Gln GAC Asp 60	AGA Arg ACG Thr 45 AAG Lys	ATT Ile 30 CGG Arg	Val 15 ATT Ile GGC Gly CAG Gln	TTA Leu CTA Leu GTC Val	96
5777 5778 5779 5780 5781 5782 5783 5784 5785 5786 5787 5788 5788 5790 5791	Met 1 CGC Arg TCT Ser CTT Leu GAG Glu	GGC Gly GGT Gly 50 GGA	AGC Ser AGT Ser 35 TGC Cys	CAT His 20 GGT Gly AAG Lys	His 5 ATG Met AGT Ser ATC Ile	GGT Gly ATC Ile ACT Thr GTG Val	TCT Ser ACG Thr AGC Ser 55	GCC Ala 40 CTT Leu	His GTT Val 25 TAC Tyr ACA Thr	His 10 ATT Ile TCC ser GGC Gly	GTT Val CAA Gln CGG Arg	GGT Gly CAG Gln GAC Asp 60	AGA Arg ACG Thr 45 AAG Lys	ATT Ile 30 CGG Arg	Val 15 ATT Ile GGC Gly CAG Gln	TTA Leu CTA Leu GTC Val	96 . 144 192
5777 5778 5779 5780 5781 5782 5783 5784 5785 5786 5787 5788 5789 5790 5791 5792 5793	Met 1 CGC Arg TCT Ser CTT Leu GAG	GGC Gly GGT Gly 50 GGA	AGC Ser AGT Ser 35 TGC Cys	CAT His 20 GGT Gly AAG Lys	His 5 ATG Met AGT Ser ATC Ile	GGT Gly ATC lle ACT Thr	TCT Ser ACG Thr AGC Ser 55	GCC Ala 40 CTT Leu	His GTT Val 25 TAC Tyr ACA Thr	His 10 ATT Ile TCC ser GGC Gly	GTT Val CAA Gln CGG Arg	GGT Gly CAG Gln GAC Asp 60	AGA Arg ACG Thr 45 AAG Lys	ATT Ile 30 CGG Arg	Val 15 ATT Ile GGC Gly CAG Gln	TTA Leu CTA Leu GTC Val	96 . 144 192
5777 5778 5779 5780 5781 5782 5783 5784 5785 5786 5787 5788 5788 5790 5791	Met 1 CGC Arg TCT Ser CTT Leu GAG Glu 65	GGC Gly GGT Gly GGT Gly 50 GGA Gly	AGC Ser AGT Ser 35 TGC Cys	CAT His 20 GGT Gly AAG Lys	His 5 ATG Met AGT Ser ATC Ile CAG Gln	GGT Gly ATC Ile ACT Thr GTG Val 70	TCT Ser ACG Thr AGC Ser 55 GTT Val	GCC Ala 40 CTT Leu	His GTT Val 25 TAC Tyr ACA Thr	His 10 ATT Ile TCC Ser GGC Gly	GTT Val CAA Gln CGG Arg	GGT Gly CAG Gln GAC Asp 60	AGA Arg ACG Thr 45 AAG Lys	ATT Ile 30 CGG Arg AAC Asn TTC Phe	Val 15 ATT Ile GGC Gly CAG Gln CTG Leu	TTA Leu CTA Leu GTC Val	96 . 144 192

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

														IN	PUT	SET:	S31474.raw
5796 5797 5798	Thr	Cys	Val	Asn	Gly 85	Val	Cys	Trp	Thr	Val 90	Tyr	His	Gly	Ala	Gly 95	Ser	
5799	AAG	ACC	TTA	GCC	GGC	CCA	AAG	GGG	CCA	ATC	ACC	CAG	ATG	TAC	ACT	AAT	336
5800	Lys	Thr	Leu	Ala	Gly	Pro	Lys	Gly	Pro	Ile	Thr	Gln	Met	Tyr	Thr	Asn	
5801				100					105					110			
5802																	
5803					CTC												384
5804	vaı	Asp		Asp	Leu	vaı	GTĀ	_	GIN	АТа	Pro	Pro	-	Ата	arg	ser	
5805 5806			115			•		120					125			•	
5807	ጥጥር	۸۵۸	CCA	TCC	ACC	ጥረም	aac	AGC	<b>ም</b> ር ል	GAC	CTTT	ጥልሮ	ጥጥር	GTC	) CC	AGA	432
5808					Thr												432
5809	пса	130		0,5	••••	0,5	135	501	DCI	пор	DCG	140	БСС	Vai		n- 9	
5810																	
5811	CAT	GCT	GAC	GTC	ATT	CCG	GTG	CGC	CGG	CGG	GGC	GAC	AGT	AGG	GGG	AGC	480
5812	His	Ala	Asp	٧al	Ile	Pro	Val	Arg	Arg	Arg	Gly	Asp	Ser	Arg	Gly	Ser	
5813	145		_			150		_	_	_	155	_		_	_	160	
5814																	
5815					AGG												528
5816	Leu	Leu	Ser	Pro	Arg	Pro	Val	Ser	Tyr		Lys	Gly	Ser	Ala	_	Gly	
5817					165					170					175		
5818	~~>	ama	ama	maa		maa	~~~	~~~		ama						~~~	
5819					CCT												576
5820 5821	Pro	Leu	Leu	180	Pro	Ser	GIY	HIS	185	vaı	GIY	тте	Pne	190	Ата	Ата	
5822				100					102					190			
5823	сπа	TGC	ACC	CGG	GGG	GTT	GCG	ΔAG	GCG	GTG	GAC	ффф	GTG	ccc	СΤΆ	GAG	624
5824					Gly												024
5825		-1-	195	5	1			200					205				
5826																	
5827	TCC	ATG	GAA	ACT	ACT	ATG	CGG	TCT	CCG	GTC	TTC	ACG	GAC	AAC	TCA	TCC	672
5828	Ser	Met	Glu	Thr	Thr	Met	Arg	Ser	Pro	Val	Phe	Thr	Asp	Asn	Ser	Ser	
5829		210					215					220					
5830																	
5831					CCG												720
5832		Pro	Ala	Val	Pro		Ser	Phe	Gln	Val		His	Leu	His	Ala		
5833	225					230					235					240	
5834 5835	» cim	aaa	3.00	000	330	3 am	3 CM		аша	aaa	aam	<b>aa</b> .	m . m	<b>aa</b> 3	000	<b>~~</b>	769
5836					AAG Lys												768
5837	1111	сту	Ser	сту	245	per	1111	гуз	Val	250	Ата	ATG	ıyı	АТа	255	GIII	
5838					243					230					233		
5839	GGG	TAC	AAG	GTG	СТС	GTC	СТС	ААТ	CCG	TCC	GTT	GCC	GCT	ACC	тта	GGG	816
5840					Leu												
5841	-	-	-	260					265					270		- 2	
5842																	
5843	TTT	GGG	GCG	TAT	ATG	TCT	AAG	GCA	CAC	GGT	ATT	GAC	CCC	AAC	ATC	AGA	864
5844	Phe	Gly	Ala	Tyr	Met	Ser	Lys	Ala	His	Gly	Ile	Asp	Pro	Asn	Ile	Arg	
5845			275					280					285				
5846																	
5847					ACC												912
5848	Thr	GTA	Val	Arg	Thr	Ile	Thr	Thr	СТУ	Ala	Pro	Val	Thr	Tyr	Ser	Thr	

### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999 TIME: 11:22:48

INPUT SET: S31474,raw

														IN	PUT	SET:	S31474.raw
5849		290					295					300					
5850																	
5851	TAT	GGC	AAG	TTT	CTT	GCC	GAT	GGT	GGT	TGC	TCT	GGG	GGC	GCT	TAT	GAC	960
5852	Tyr	Gly	Lys	Phe	Leu	Ala	Asp	Gly	Gly	Cys	Ser	Gly	Gly	Ala	Tyr	Asp	
5853	305					310					315					320	
5854																	
5855	ATC	ATA	ATA	TGT	GAT	GAG	TGC	CAT	TCA	ACT	GAC	TCG	ACT	ACA	ATC	TTG	1008
5856	Ile	Ile	Ile	Cys	Asp	Glu	Cys	His	Ser	Thr	Asp	Ser	Thr	Thr	Ile	Leu	
5857				_	325		-			330	_				335		
5858																	
5859	GGC	ATC	GGC	ACA	GTC	CTG	GAC	CAA	GCG	GAG	ACG	GCT	GGA	GCG	CGG	CTT	1056
5860	Gly	Ile	Gly	Thr	Val	Leu	Asp	Gln	Ala	Glu	Thr	Ala	Gly	Ala	Arg	Leu	
5861	_		-	340			-		345				-	350	_		
5862																	
5863	GTC	GTG	CTC	GCC	ACC	GCT	ACG	CCT	CCG	GGA	TCG	GTC	ACC	GTG	CCA	CAC	1104
5864									Pro								
5865			355					360		3			365				
5866																	
5867	CCA	AAC	ATC	GAG	GAG	GTG	GCC	CTG	TCT	ААТ	ACT	GGA	GAG	ATC	CCC	TTC	1152
5868									Ser								
5869		370					375					380					
5870		•															
5871	TAT	GGC	AAA	GCC	ATC	CCC	ATT	GAA	GCC	ATC	AGG	GGG	GGA	AGG	CAT	CTC	1200
5872									Ala								
5873	385	1	-1-			390					395	1	1	5		400	
5874																	
5875	АТТ	ттс	TGT	CAT	TCC	AAG	AAG	AAG	TGC	GAC	GAG	СТС	GCC	GCA	AAG	СТС	1248
5876									Cys								1210
5877			-1-		405	-7-	-,-	_,_	0,70	410	014				415	200	
5878					100					110					110		
5879	TCA	GGC	стс	GGA	ATC	AAC	GCT	GTG	GCG	тдт	TAC	CGG	GGG	СТС	САТ	GTG	1296
5880									Ala								
5881	201	1	200	420				· u _	425	- 7 -	- 3 -	n- 9	017	430	пор	• • •	
5882									120					150			
5883	TCC	GTC	ΔΤΔ	CCA	ΔСТ	ΔТС	GGA	GAC	GTC	ርጥጥ	GTC	GTG	GCA	ACA	GAC	CCT	1344
5884									Val								1511
5885	201		435				<b>-</b> 1	440					445	****	11.55		
5886			100					110					113				
5887	СТС	ΔТС	ACG	GGC	ጥልጥ	ΔCG	GGC	GAC	ттт	GAC	<b>ጥ</b> ሮ ል	стс	ΔͲሮ	GAC	ጥርጥ	AAC	1392
5888									Phe								1372
5889		450		<b>-</b> -1	- 3 -		455	пор	1 110	пор		460		пор	0,0		
5890		150					100					400					
5891	۵۵۵	ጥርሞ	GTC	۵CC	CAG	ΔαΔ	CTC	GAC	TTC	ACC	ጥጥር	СУТ	ccc	A C C	ጥጥር	ACC	1440
5892									Phe								1440
5893	465	Cys	4 G T	****	O T 11	470	V G T	rab	FIIG	PEI	475	тор	FIO	1111	FIIG	480	
5894	-03					± / U					<del>-</del> / J					±00	
5895	יויניי ע	GAG	አሮሮ	ልሮሮ	<b>A</b> CC	GTIC!	CCT	מאא	GAC	CCA	QTI C	ምርር	aaa	ሞሮሮ	CAC	ccc	1488
5896									Asp								1400
5897	TTG	GIU	TILL	1111	485	val	FLO	GTII	wsb	490	val	per.	Arg	per	495	ALG	
5898					400					4 70					4 7 3		
5899	aaa	CCT	אממ	λCT	aaa	N C C	CCT	אממ	AGA	aaa	λ m.c	mac	N CC	mmm.	OTT C	A CITT	1526
5900																	1536
5900	мгg	ату	Arg	500	стА	Arg	GTÀ	Arg	Arg	GTÀ	тте	TAT	Arg		νат	1111	
2301				500					505		•			510			

5953

5954 (ix) FEATURE:

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

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						21 1 1	<b>7 XI I</b> .	LIC1			,5,0,	7170	, , 232	•			1111112. 11.2.
														IN	<b>VPUT</b>	SET:	S31474.raw
5902															,		
5903	CCG	GGA	GAA	CGG	CCC	TCG	GGC	ATG	TTC	GAT	TCC	TCG	GTC	CTG	TGT	GAG	1584
5904	Pro	Gly	Glu	Arg	Pro	Ser	Gly	Met	Phe	Asp	Ser	Ser	Val	Leu	Cys	Glu	
5905		_	515	_			-	520		-			525		_		
5906																	
5907	TGC	TAT	GAC	GCG	GGC	TGT	GCT	TGG	TAC	GAG	CTC	ACC	CCC	GCC	GAG	ACC	1632
5908	Cys	Tyr	Asp	Ala	Gly	Cys	Ala	Trp	Tyr	Glu	Leu	Thr	Pro	Ala	Glu	Thr	
5909	-	530	-		-	•	535	-	•			540					
5910																	
5911	TCG	GTT	AGG	TTG	CGG	GCC	TAC	CTG	AAC	ACA	CCA	GGG	TTG	CCC	GTT	TGC	1680
5912	Ser	Val	Arg	Leu	Arg	Ala	Tyr	Leu	Asn	Thr	Pro	Gly	Leu	Pro	Val	Cys	
5913	545		_		_	550	•				555	-				560	
5914																	
5915	CAG	GAC	CAC	CTG	GAG	TTC	TGG	GAG	AGT	GTC	TTC	ACA	GGC	CTC	ACC	CAT	1728
5916	Gln	Asp	His	Leu	Glu	Phe	Trp	Glu	Ser	Val	Phe	Thr	Gly	Leu	Thr	His	
5917		_			565		-			570			-		575		
5918																	
5919	ATA	GAT	GCA	CAC	TTC	TTG	TCC	CAG	ACC	AAG	CAG	GCA	GGA	GAC	AAC	TTC	1776
5920	Ile	Asp	Ala	His	Phe	Leu	Ser	Gln	Thr	Lys	Gln	Ala	Gly	Asp	Asn	Phe	
5921				580					585	-				590			
5922																	
5923	CCC	TAC	CTG	GTA	GCA	TAC	CAA	GCC	ACG	GTG	TGC	GCC	AGG	GCT	CAG	GCC	1824
5924	Pro	Tyr	Leu	Val	Ala	Tyr	Gln	Ala	Thr	Val	Cys	Ala	Arg	Ala	Gln	Ala	
5925			595					600					605				
5926																	
5927	CCA	CCT	CCA	TCA	TGG	GAT	CAA	ATG	TGG	AAG	TGT	CTC	ATA	CGG	CTG	AAA	1872
5928	Pro	Pro	Pro	Ser	Trp	Asp	Gln	Met	Trp	Lys	Cys	Leu	Ile	Arg	Leu	Lys	
5929		610					615					620					
5930																	
5931												AGG					1920
5932		Thr	Leu	His	Gly		Thr	Pro	Leu	Leu		Arg	Leu	Gly	Ala		
5933	625					630					635					640	
5934																	
5935												AAA					1968
5936	GIn	Asn	GLu	Val		Leu	Thr	His	Pro		Thr	Lys	Tyr	Ile		Ala	
5937					645					650					655		
5938	maa		maa		a. a	ama	~~~		ama								1000
5939									GTC		<i>[</i>						1998
5940	cys	мет	Ser		Asp	Leu	GIU	vaı	Val	:/	, <b>.</b>					~=~ -	n 10.100
5941 5942				660					665		(2).	TNEO	KMA'I'.	LON .	FOR :	SEQ 1	D NO:108:
5942 5943		, :	\ CE/	37 IEI 874	3E 01	** ** **	ampp.	r am r									
		( τ	) SE(														
5944 5945					ENGTI YPE:				pair	LS							
5945 5946				•													
5946 5947					rani Pol				1TG								
5947 5948	•		( )	רט דע	<b>ひとの</b> で(	JG I :	TT116	=a1									
5946 5949		/ 4 4	) MOI	יייטים	יותי יוםי	DF.	C DAT	Λ.									
5950		(11	, 14101	الاعتداد	um II	rtu;	CDM	-									
5951																	
5952																	

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999 TIME: 11:22:49

															IN	PUT	SET: S.	31474.raw
	5955			(1	A) N	AME/I	KEY:	CDS										
	5956			•	•		ION:		1998									
	5957			, -	-, -													
	5958																	
>	5959		(xi	SEC	OUEN	CE DI	ESCR	EPTIC	on: s	SEO I	D NO	0:10	3					
-	5960		(	,,									-					
	5961	ATG	GGC	AGC	AGC	CAT	CAT	CAT	CAT	CAT	CAC	AGC	AGC	GGC	CTG	GTG	CCG	48
	5962						His											
	5963	1	<b>-</b>			5					10			<b>-</b> -1		15		
	5964	_				_												
	5965	CGC	GGC	AGC	CAT	ATG	GGT	TCT	GTT	GTT	ATT	GTT	GGT	AGA	ATT	ATT	TTA	96
	5966						Gly											
	5967	5	1		20		1			25			1	5	30			
	5968																	
	5969	TCT	GGT	AGT	GGT	AGT	ATC	ACG	GCC	TAC	TCC	CAA	CAG	ACG	CGG	GGC	CTA	144
	5970						Ile											
	5971		-	35	-				40	-				45		-		
	5972																	
	5973	CTT	GGT	TGC	ATC	AAG	ACT	AGC	CTT	ACA	GGC	CGG	GAC	AAG	AAC	CAG	GTC	192
	5974						Thr											
	5975		50	4		- 4		55			-	-	60	-				
	5976																	
	5977	GAG	GGA	GAG	GTT	CAG	GTG	GTT	TCC	ACC	GCA	ACA	CAA	TCC	TTC	CTG	GCG	240
	5978						Val											
	5979	65	•				70					75					80	
	5980																	
	5981	ACC	TGC	GTC	AAC	GGC	GTG	TGT	TGG	ACC	GTT	TAC	CAT	GGT	GCT	GGC	TCA	288
	5982	Thr	Cys	Val	Asn	Gly	Val	Cys	Trp	Thr	Val	Tyr	His	Gly	Ala	Gly	Ser	
	5983		_			85		-	•		90	-		-		95		
	5984																	
	5985	AAG	ACC	TTA	GCC	GGC	CCA	AAG	GGG	CCA	ATC	ACC	CAG	ATG	TAC	ACT	AAT	336
	5986	Lys	Thr	Leu	Ala	Gly	Pro	Lys	Gly	Pro	Ile	Thr	Gln	Met	Tyr	Thr	Asn	
	5987				100					105					110			
	5988																	
	5989	GTG	GAC	CAG	GAC	CTC	GTC	GGC	TGG	CAG	GCG	CCC	CCC	GGG	GCG	CGT	TCC	384
	5990	Val	Asp	Gln	Asp	Leu	Val	Gly	Trp	Gln	Ala	Pro	Pro	Gly	Ala	Arg	Ser	
	5991			115					120					125				
	5992																	
	5993						TGT											432
	5994		Thr				Cys								Val	Thr	Arg	
	5995		130					135					140					
	5996																	
	5997						CCG											480
	5998		Ala	Asp	Val	Ile	Pro	Val	Arg	Arg	Arg	_	Asp	Ser	Arg	Gly		
	5999	145					150					155					160	
	6000	<b></b>												_				
	6001						CCT											528
	6002	Leu	Leu	Ser	Pro	_	Pro	Val	Ser	Tyr		Lys	Gly	Ser	Ala	_	СТÀ	
	6003					165					170					175		
	6004															<b></b>		
	6005						TCG											576
	6006	Pro	Leu	Leu	_	Pro	Ser	Gly	His		Val	Gly	Ile	Phe	_	Ala	Ala	
	6007				180					185					190			

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999 TIME: 11:22:49

														Zi.	PUI	SEI: S	314/4.raw
6008	C	maa		~~~	~~~	amm	~~~		~~~	ama	<b>~</b> 1.~			~~~	am.	ana	
6009														CCC			624
6010	vaı	Cys		Arg	GTA	val	Ата	_	АТА	val	Asp	Pne		Pro	vaı	GIU	
6011			195					200					205				
6012 6013	maa	N MC	<b>GN</b> N	N CITT	N CIE	» ma	000	mam	aaa	ama	mma	3.00	<b>a a a</b>	AAC	ma a	maa.	672
6014														Asn			6/2
6014	261	210	GIU	THE	THE	мес	215	Ser	PLO	۷ат	Pne	220	ASP	ASII	Ser	per	
6016		210					213					220					
6017	ccc	ccc	acc	CTA	ccc	CAG	<b>ጥ</b> ር እ	ափա	CAA	GTG.	acc	CAC	CITIA	CAC	CCT	CCC	720
6018														His			720
6019	225	110	AIG	Val	110	230	Der	1110	01	VUI	235	1113	пец	1110	AIU	240	
6020	223					230					255					210	
6021	АСТ	GGC	AGC	GGC	AAG	AGT	ΔСТ	ΔΔΔ	GTG	ccc	GCT	GCA	ጥልጥ	GCA	GCC	CAA	768
6022														Ala			,,,,
6023	••••			,	245			-,-		250			- 1 -		255	<b>U</b>	
6024																	
6025	GGG	TAC	AAG	GTG	CTC	GTC	CTC	ААТ	CCG	TCC	GTT	GCC	GCT	ACC	TTA	GGG	816
6026														Thr			
6027	•	•	•	260					265					270		•	
6028																	
6029	TTT	GGG	GCG	TAT	ATG	TCT	AAG	GCA	CAC	GGT	ATT	GAC	CCC	AAC	ATC	AGA	864
6030	Phe	Gly	Ala	Tyr	Met	Ser	Lys	Ala	His	Gly	Ile	Asp	Pro	Asn	Ile	Arg	
6031			275					280					285				
6032																	
6033														TAC			912
6034	Thr	-	Val	Arg	Thr	Ile		Thr	Gly	Ala	Pro	Val	Thr	Tyr	Ser	Thr	
6035		290					295					300					•
6036																	
6037														GCT			960
6038	-	СТĀ	Lys	Phe	Leu		Asp	GTÀ	GTÄ	Cys		GTÀ	GTÀ	Ala	Tyr	_	
6039	305					310					315					320	
6040 6041	N TO CO	a m a	a m a	mam	O A ITT	a a a	maa	CI A ITT	ma s	N CIO	a va	maa	» am	202	» ma	mma	1008
6041														ACA Thr			1008
6043	176	TTE	TTE	Cys	325	GIU	Cys	UIS	Ser	330	ASP	Ser	1111	1111	335	Leu	
6044					323					330					333		
6045	GGC	ATC	GGC	ACA	GTC	СТС	GAC	CAA	GCG	GAG	ACG	GCT	GGA	GCG	CGG	СТТ	1056
6046														Ala			2000
6047	4		2	340			E		345				1	350	3		
6048																	
6049	GTC	GTG	CTC	GCC	ACC	GCT	ACG	CCT	CCG	GGA	TCG	GTC	ACC	GTG	CCA	CAC	1104
6050														Val			
6051			355					360		-			365				
6052																	
6053	CCA	AAC	ATC	GAG	GAG	GTG	GCC	CTG	TCT	AAT	ACT	GGA	GAG	ATC	CCC	TTC	1152
6054	Pro	Asn	Ile	Glu	Glu	Val	Ala	Leu	Ser	Asn	Thr	Gly	Glu	Ile	Pro	Phe	
6055		370					375					380					
6056																	
6057														AGG			1200
6058		Gly	Lys	Ala	Ile		Ile	Glu	Ala	Ile		Gly	Gly	Arg	His		
6059	385					390					395					400	
6060																	

## RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

														IN	PUT	SET: S	31474.raw
6061	ATT	TTC	TGT	CAT	TCC	AAG	AAG	AAG	TGC	GAC	GAG	CTC	GCC	GCA	AAG	CTG	1248
6062	Ile	Phe	Cys	His	Ser	Lys	Lys	Lys	Cys	Asp	Glu	Leu	Ala	Ala	Lys	Leu	
6063			_		405	_	-	_	_	410					415		
6064																	
6065	TCA	GGC	CTC	GGA	ATC	AAC	GCT	GTG	GCG	TAT	TAC	CGG	GGG	CTC	GAT	GTG	1296
6066	Ser	Gly	Leu	Gly	Ile	Asn	Ala	Val	Ala	Tyr	Tyr	Arq	Gly	Leu	Asp	Val	
6067		-		420					425	-	-	_	•	430	_		
6068																	
6069	TCC	GTC	ATA	CCA	ACT	ATC	GGA	GAC	GTC	GTT	GTC	GTG	GCA	ACA	GAC	GCT	1344
6070					Thr												
6071			435				-	440					445		_		
6072																	
6073	CTG	ATG	ACG	GGC	TAT	ACG	GGC	GAC	TTT	GAC	TCA	GTG	ATC	GAC	TGT	AAC	1392
6074	Leu	Met	Thr	Gly	Tyr	Thr	Gly	Asp	Phe	Asp	Ser	Val	Ile	Asp	Cys	Asn	
6075		450		_	-		455	-		_		460		-	-		
6076																	
6077	ACA	TGT	GTC	ACC	CAG	ACA	GTC	GAC	TTC	AGC	TTG	GAT	CCC	ACC	TTC	ACC	1440
6078	Thr	Cys	Val	Thr	Gln	Thr	Val	Asp	Phe	Ser	Leu	Asp	Pro	Thr	Phe	Thr	
6079	465	•				470		-			475	•				480	
6080																	
6081	ATT	GAG	ACG	ACG	ACC	GTG	CCT	CAA	GAC	GCA	GTG	TCG	CGC	TCG	CAG	CGG	1488
6082	Ile	Glu	Thr	Thr	Thr	Val	Pro	Gln	Asp	Ala	Val	Ser	Arg	Ser	Gln	Arg	
6083					485				-	490			_		495	_	
6084																	
6085	CGG	GGT	AGG	ACT	GGÇ	AGG	GGT	AGG	AGA	GGC	ATC	TAC	AGG	TTT	GTG	ACT	1536
6086	Arg	Gly	Arg	Thr	Gly	Arg	Gly	Arg	Arg	Gly	Ile	Tyr	Arg	Phe	Val	Thr	
6087				500					505					510			
6088																	
6089	CCG	GGA	GAA	CGG	CCC	TCG	GGC	ATG	TTC	GAT	TCC	TCG	GTC	CTG	TGT	GAG	1584
6090	Pro	Gly	Glu	Arg	Pro	Ser	Gly	Met	Phe	Asp	Ser	Ser	Val	Leu	Cys	Glu	
6091			515					520					525				
6092																	
6093	TGC	TAT	GAC	GCG	GGC	TGT	GCT	TGG	TAC	GAG	CTC	ACC	CCC	GCC	GAG	ACC	1632
6094	Cys	Tyr	Asp	Ala	Gly	Cys	Ala	Trp	Tyr	Glu	Leu	Thr	Pro	Ala	Glu	Thr	
6095		530					535					540					
6096																	
6097					CGG												1680
6098	Ser	Val	Arg	Leu	Arg	Ala	Tyr	Leu	Asn	Thr	Pro	Gly	Leu	Pro	Val	Cys	
6099	545					550					555					560	
6100																	
6101					GAG												1728
6102	Gln	Asp	His	Leu	Glu	Phe	Trp	Glu	Ser	Val	Phe	Thr	Gly	Leu	Thr	His	
6103					565					570					575		
6104																	
6105					TTC												1776
6106	Ile	Asp	Ala		Phe	Leu	Ser	Gln		Lys	Gln	Ala	Gly	Asp	Asn	Phe	
6107				580					585					590			•
6108																	
6109					GCA												1824
6110	Pro	Tyr		Val	Ala	Tyr	Gln		Thr	Val	Cys	Ala	Arg	Ala	Gln	Ala	
6111			595					600					605				
6112																	
6113	CCA	CCT	CCA	TCA	TGG	GAT	CAA	ATG	TGG	AAG	TGT	CTC	ATA	CGG	CTG	AAA	1872

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

														73	יוניו ובנו	CET.	C21474
6114	Dwa	Dwa	D=-	C - w	<b></b>	1	a1 -	W-+	Ш~~	T	a	T	<b>-1</b> -				S31474.raw
6114 6115	PIO	610	PIO	Ser	Trp	ASP	615	мес	пр	гуѕ	cys	620	тте	Arg	nea	гуъ	
6116		010					013					020					
6117	COT	N.C.C	CTC	CAC	GGG	CCA	אמא	ccc	መመረ	CTC	መአሮ	NCC	CITIC	CCA	acc	GT/C	1920
6118					Gly												1920
6119	625	1111	Leu	nis	СТУ	630	1111	PIO	Leu	Leu	635	Arg	ьęи	GTÅ	ALG	640	
6120	023					630					633					040	
6121	(12.2	2 2 17	CAC	ama	ACC	ama	3 CC	ara	aaa	א ווו א	3.00	* * *	шла	N TO C	а ш С	CCA	1968
6121					Thr												1900
6123	GIII	ASII	GIU	vaı	645	Leu	1111	UIS	PIO	650	IIII	гуѕ	ığı	тте	655	АТА	
6124					043					650					633		
6125	TICC	λπα	TICC	COT	GAC	CTC	CAC	CTC	CTIC	λCIT							1998
6126					Asp						1						1990
6127	Cys	мес	261	660	мор	neu	GIU	Val	665			r Ni Ero I	ora m.	ron i	7AD (	מבי א	D NO:109:
6128				000					003	_	(2) -	LNEOI	MMI.	LON	OK .	PEQ 1	.D NO.109.
6129		/ i	CE/	TIPNO	CE CI	INDAC	ים שיחיר	T CTT (	٦0.								
6130		( +		_	ENGT												
6131					PE:				_								
6132					[RANI												
6133				•	POL				310								
6134			١,	,	JI OLI		T T 111	Jul									
6135		/ii	MOI	.eciii	E TY	PF.	CDN	Δ									
6136		,	, 1.101	3DC01	J.J. I.		CD112	•									
6137																	
6138		/ix	) FE	ומודי	₹ :												
		(	,				ana										
6139			- (1	A) NA	AME/E	CEY:	CDS										
6139 6140				A) NA B) L(				1998									
6140				•	CAT:			1998									
6140 6141				•				1998									
6140 6141 6142		(xi	(1	3) L(	OCAT]	ON:	1		SEO 3	ED NO	0:109	<b>)</b> :					
6140 6141		(xi)	(1	3) L(		ON:	1		SEQ 1	ID NO	0:109	<b>)</b> :					
6140 6141 6142 <b>6143</b>	ATG	, ,	(I SE(	QUENC	CE DE	ion: Escri	1	ON: S	_				GGC	CTG	GTG	CCG	48
6140 6141 6142 <b>6143</b> 6144		GGC	SE(	DUENC AGC	CAT	ON: ESCRI CAT	1	ON: S	CAT	CAC	AGC	AGC					48
6140 6141 6142 <b>6143</b> 6144 6145		GGC	SE(	DUENC AGC	CE DE	ON: ESCRI CAT	1	ON: S	CAT	CAC	AGC	AGC					48
6140 6141 6142 <b>6143</b> 6144 6145 6146	Met	GGC	SE(	DUENC AGC	CE DE	ON: ESCRI CAT	1	ON: S	CAT	CAC His	AGC	AGC			Val		48
6140 6141 6142 <b>6143</b> 6144 6145 6146 6147	Met 1	GGC Gly	SEC AGC Ser	QUENC AGC Ser	CE DE	ON: ESCRI CAT His	PTIC CAT His	ON: S CAT His	CAT His	CAC His 10	AGC Ser	AGC Ser	Gly	Leu	Val 15	Pro	<b>4</b> 8 96
6140 6141 6142 <b>6143</b> 6144 6145 6146 6147	Met 1 CGC	GGC Gly GGC	SEC AGC Ser	QUENC AGC Ser CAT	CE DI CAT His 5	CAT His	CAT His	ON: S CAT His	CAT His	CAC His 10	AGC Ser	AGC Ser	Gly AGA	Leu ATT	Val 15	Pro TTA	
6140 6141 6142 <b>6143</b> 6144 6145 6146 6147 6148 6149	Met 1 CGC	GGC Gly GGC	SEC AGC Ser	QUENC AGC Ser CAT	CE DE CAT His 5	CAT His	CAT His	ON: S CAT His	CAT His	CAC His 10	AGC Ser	AGC Ser	Gly AGA	Leu ATT	Val 15	Pro TTA	
6140 6141 6142 <b>6143</b> 6144 6145 6146 6147 6148 6149 6150	Met 1 CGC	GGC Gly GGC	SEC AGC Ser	QUENC AGC Ser CAT His	CE DE CAT His 5	CAT His	CAT His	ON: S CAT His	CAT His GTT Val	CAC His 10	AGC Ser	AGC Ser	Gly AGA	Leu ATT Ile	Val 15	Pro TTA	
6140 6141 6142 <b>6143</b> 6144 6145 6146 6147 6148 6149 6150 6151	Met 1 CGC Arg	GGC Gly GGC Gly	AGC Ser AGC Ser	QUENC AGC Ser CAT His 20	CE DE CAT His 5	CAT His GGT Gly	CAT His TCT Ser	CAT His GTT Val	CAT His GTT Val 25	CAC His 10 ATT Ile	AGC Ser GTT Val	AGC Ser GGT Gly	Gly AGA Arg	ATT Ile 30	Val 15 ATT Ile	Pro TTA Leu	
6140 6141 6142 <b>6143</b> 6144 6145 6146 6147 6148 6149 6150 6151 6152	Met 1 CGC Arg	GGC Gly GGC Gly	AGC Ser AGC Ser	QUENC AGC Ser CAT His 20	CE DI CAT His 5 ATG Met	CAT His GGT Gly	CAT His TCT Ser	CAT His GTT Val	CAT His GTT Val 25	CAC His 10 ATT Ile	AGC Ser GTT Val	AGC Ser GGT Gly	Gly AGA Arg ACG	ATT Ile 30	Val 15 ATT Ile	Pro TTA Leu CTA	96
6140 6141 6142 <b>6143</b> 6144 6145 6146 6147 6148 6149 6150 6151 6152 6153	Met 1 CGC Arg	GGC Gly GGC Gly	AGC Ser AGC Ser	QUENC AGC Ser CAT His 20	CE DE CAT His 5 ATG Met	CAT His GGT Gly	CAT His TCT Ser	CAT His GTT Val	CAT His GTT Val 25	CAC His 10 ATT Ile	AGC Ser GTT Val	AGC Ser GGT Gly	Gly AGA Arg ACG	ATT Ile 30	Val 15 ATT Ile	Pro TTA Leu CTA	96
6140 6141 6142 <b>6143</b> 6144 6145 6146 6147 6148 6149 6150 6151 6152 6153 6154	Met 1 CGC Arg	GGC Gly GGC Gly	AGC Ser  AGC Ser  AGC Ser	QUENC AGC Ser CAT His 20	CE DE CAT His 5 ATG Met	CAT His GGT Gly	CAT His TCT Ser	CAT His GTT Val GCC Ala	CAT His GTT Val 25	CAC His 10 ATT Ile	AGC Ser GTT Val	AGC Ser GGT Gly	AGA Arg ACG Thr	ATT Ile 30	Val 15 ATT Ile	Pro TTA Leu CTA	96
6140 6141 6142 <b>6143</b> 6144 6145 6146 6147 6148 6149 6150 6151 6152 6153 6154 6155	Met 1 CGC Arg TCT Ser	GGC Gly GGC Gly GGT Gly	AGC Ser AGC Ser AGT Ser 35	QUENC AGC Ser CAT His 20 GGT Gly	CE DE CAT His 5 ATG Met AGT Ser	CAT His GGT Gly ATC Ile	CAT His TCT Ser ACG Thr	CAT His GTT Val GCC Ala 40	CAT His GTT Val 25 TAC Tyr	CAC His 10 ATT Ile TCC Ser	AGC Ser GTT Val CAA Gln	AGC Ser GGT Gly CAG Gln	AGA Arg ACG Thr 45	ATT Ile 30 CGG Arg	Val 15 ATT Ile GGC Gly	TTA Leu CTA Leu	96
6140 6141 6142 <b>6143</b> 6144 6145 6146 6147 6148 6149 6150 6151 6152 6153 6154 6155 6156	Met 1 CGC Arg TCT Ser	GGC Gly GGC Gly GGT Gly	AGC Ser AGC Ser AGT Ser 35	QUENC AGC Ser CAT His 20 GGT Gly	CE DE CAT His 5 ATG Met AGT Ser	CAT His GGT Gly ATC Ile	CAT His TCT Ser ACG Thr	CAT His GTT Val GCC Ala 40	CAT His GTT Val 25 TAC Tyr	CAC His 10 ATT Ile TCC Ser	AGC Ser GTT Val CAA Gln	AGC Ser GGT Gly CAG Gln	AGA Arg ACG Thr 45	ATT Ile 30 CGG Arg	Val 15 ATT Ile GGC Gly	TTA Leu CTA Leu	96 144
6140 6141 6142 <b>6143</b> 6144 6145 6146 6147 6148 6149 6150 6151 6152 6153 6154 6155 6156 6157	Met 1 CGC Arg TCT Ser	GGC Gly GGC Gly GGT Gly	AGC Ser AGC Ser AGT Ser 35	QUENC AGC Ser CAT His 20 GGT Gly	CE DE CAT His 5 ATG Met AGT Ser	CAT His GGT Gly ATC Ile	CAT His TCT Ser ACG Thr	CAT His GTT Val GCC Ala 40	CAT His GTT Val 25 TAC Tyr	CAC His 10 ATT Ile TCC Ser	AGC Ser GTT Val CAA Gln	AGC Ser GGT Gly CAG Gln	AGA Arg ACG Thr 45	ATT Ile 30 CGG Arg	Val 15 ATT Ile GGC Gly	TTA Leu CTA Leu	96 144
6140 6141 6142 <b>6143</b> 6144 6145 6146 6147 6148 6149 6150 6151 6152 6153 6154 6155 6156 6157 6158 6159 6160	Met 1 CGC Arg TCT Ser CTT Leu	GGC Gly GGT Gly GGT Gly 50	AGC Ser  AGC Ser  AGC Ser  TGC Cys	QUENC AGC Ser CAT His 20 GGT Gly	CAT CAT His 5 ATG Met AGT Ser AAG Lys	CAT His GGT Gly ATC Ile ACT	CAT His TCT Ser ACG Thr	CAT His GTT Val GCC Ala 40 CTT Leu	CAT His GTT Val 25 TAC Tyr	CAC His 10 ATT Ile TCC Ser GGC Gly	AGC Ser GTT Val CAA Gln CGG Arg	AGC Ser GGT Gly CAG Gln GAC Asp 60	AGA Arg ACG Thr 45 AAG Lys	ATT Ile 30 CGG Arg AAC	Val 15 ATT Ile GGC Gly CAG Gln	TTA Leu CTA Leu GTC Val	96 144 192
6140 6141 6142 <b>6143</b> 6144 6145 6146 6147 6148 6149 6150 6151 6152 6153 6154 6155 6156 6157 6158 6159 6160 6161	Met 1 CGC Arg TCT Ser CTT Leu GAG	GGC Gly  GGT Gly  GGT Gly  GGT Gly  GGA	AGC Ser  AGC Ser  AGC Ser  TGC Cys	QUENC AGC Ser CAT His 20 GGT Gly AAG Lys	CAT CAT His 5 ATG Met AGT Ser AAG Lys	CAT His GGT Gly ATC Ile ACT Thr	CAT His TCT Ser ACG Thr AGC Ser 55	CAT His GTT Val GCC Ala 40 CTT Leu	CAT His GTT Val 25 TAC Tyr ACA Thr	CAC His 10 ATT Ile TCC Ser GGC Gly	AGC Ser GTT Val CAA Gln CGG Arg	AGC Ser GGT Gly CAG Gln GAC Asp 60	AGA Arg ACG Thr 45 AAG Lys	ATT Ile 30 CGG Arg	Val 15 ATT Ile GGC Gly CAG Gln	TTA Leu CTA Leu GTC Val	96 144
6140 6141 6142 <b>6143</b> 6144 6145 6146 6147 6148 6149 6150 6151 6152 6153 6154 6155 6156 6157 6158 6159 6160 6161 6162	Met 1 CGC Arg TCT Ser CTT Leu GAG Glu	GGC Gly  GGT Gly  GGT Gly  GGT Gly  GGA	AGC Ser  AGC Ser  AGC Ser  TGC Cys	QUENC AGC Ser CAT His 20 GGT Gly AAG Lys	CAT CAT His 5 ATG Met AGT Ser AAG Lys	CAT His GGT Gly ATC Ile ACT Thr	CAT His TCT Ser ACG Thr AGC Ser 55	CAT His GTT Val GCC Ala 40 CTT Leu	CAT His GTT Val 25 TAC Tyr ACA Thr	CAC His 10 ATT Ile TCC Ser GGC Gly	AGC Ser GTT Val CAA Gln CGG Arg	AGC Ser GGT Gly CAG Gln GAC Asp 60	AGA Arg ACG Thr 45 AAG Lys	ATT Ile 30 CGG Arg	Val 15 ATT Ile GGC Gly CAG Gln	TTA Leu CTA Leu GTC Val	96 144 192
6140 6141 6142 <b>6143</b> 6144 6145 6146 6147 6148 6149 6150 6151 6152 6153 6154 6155 6156 6157 6158 6159 6160 6161 6162 6163	Met 1 CGC Arg TCT Ser CTT Leu GAG	GGC Gly  GGT Gly  GGT Gly  GGT Gly  GGA	AGC Ser  AGC Ser  AGC Ser  TGC Cys	QUENC AGC Ser CAT His 20 GGT Gly AAG Lys	CAT CAT His 5 ATG Met AGT Ser AAG Lys	CAT His GGT Gly ATC Ile ACT Thr	CAT His TCT Ser ACG Thr AGC Ser 55	CAT His GTT Val GCC Ala 40 CTT Leu	CAT His GTT Val 25 TAC Tyr ACA Thr	CAC His 10 ATT Ile TCC Ser GGC Gly	AGC Ser GTT Val CAA Gln CGG Arg	AGC Ser GGT Gly CAG Gln GAC Asp 60	AGA Arg ACG Thr 45 AAG Lys	ATT Ile 30 CGG Arg	Val 15 ATT Ile GGC Gly CAG Gln	TTA Leu CTA Leu GTC Val	96 144 192
6140 6141 6142 <b>6143</b> 6144 6145 6146 6147 6148 6149 6150 6151 6152 6153 6154 6155 6156 6157 6158 6160 6161 6162 6163 6164	Met 1 CGC Arg TCT Ser CTT Leu GAG Glu 65	GGC Gly GGT Gly GGT Gly 50	AGC Ser  AGC Ser  AGC Ser  AGT Ser  35  TGC Cys	QUENC AGC Ser CAT His 20 GGT Gly AAG Lys	CE DE CAT His 5 ATG Met AGT Ser AAG Lys CAG Gln	CAT His GGT Gly ATC Ile ACT Thr	CAT His TCT Ser ACG Thr AGC Ser 55	CAT His GTT Val GCC Ala 40 CTT Leu	CAT His GTT Val 25 TAC Tyr ACA Thr	CAC His 10 ATT Ile TCC Ser GGC Gly	AGC Ser GTT Val CAA Gln CGG Arg ACA Thr 75	AGC Ser GGT Gly CAG Gln GAC Asp 60 CAA Gln	AGA Arg ACG Thr 45 AAG Lys	ATT Ile 30 CGG Arg AAC Asn TTC Phe	Val 15 ATT Ile GGC Gly CAG Gln	TTA Leu CTA Leu GTC Val GCG Ala 80	96 144 192 240
6140 6141 6142 <b>6143</b> 6144 6145 6146 6147 6148 6149 6150 6151 6152 6153 6154 6155 6156 6157 6158 6160 6161 6162 6163 6164 6165	Met 1 CGC Arg TCT Ser CTT Leu GAG Glu 65	GGC Gly  GGT Gly  GGT Gly  TGC	AGC Ser  AGC Ser  AGC Ser  AGT Ser  35  TGC Cys  GAG Glu	QUENCE SET CAT His 20 GGT Gly AAG Lys	CAT His 5 ATG Met AGT Ser AAG Lys CAG Gln	CAT His GGT Gly ATC Ile ACT Thr GTG Val 70 GTG	CAT His TCT Ser ACG Thr AGC Ser 55 GTT Val	CAT His GTT Val GCC Ala 40 CTT Leu TCC Ser	CAT His GTT Val 25 TAC Tyr ACA Thr	CAC His 10 ATT Ile TCC Ser GGC Gly GCA Ala	AGC Ser GTT Val CAA Gln CGG Arg ACA Thr 75	AGC Ser GGT Gly CAG Gln GAC Asp 60 CAA Gln CAT	AGA Arg ACG Thr 45 AAG Lys TCC Ser	ATT Ile 30 CGG Arg AAC Asn TTC Phe	Val 15 ATT Ile GGC Gly CAG Gln CTG Leu	TTA Leu CTA Leu GTC Val GCG Ala 80	96 144 192
6140 6141 6142 <b>6143</b> 6144 6145 6146 6147 6148 6149 6150 6151 6152 6153 6154 6155 6156 6157 6158 6160 6161 6162 6163 6164	Met 1 CGC Arg TCT Ser CTT Leu GAG Glu 65	GGC Gly  GGT Gly  GGT Gly  TGC	AGC Ser  AGC Ser  AGC Ser  AGT Ser  35  TGC Cys  GAG Glu	QUENCE SET CAT His 20 GGT Gly AAG Lys	CE DE CAT His 5 ATG Met AGT Ser AAG Lys CAG Gln	CAT His GGT Gly ATC Ile ACT Thr GTG Val 70 GTG	CAT His TCT Ser ACG Thr AGC Ser 55 GTT Val	CAT His GTT Val GCC Ala 40 CTT Leu TCC Ser	CAT His GTT Val 25 TAC Tyr ACA Thr	CAC His 10 ATT Ile TCC Ser GGC Gly GCA Ala	AGC Ser GTT Val CAA Gln CGG Arg ACA Thr 75	AGC Ser GGT Gly CAG Gln GAC Asp 60 CAA Gln CAT	AGA Arg ACG Thr 45 AAG Lys TCC Ser	ATT Ile 30 CGG Arg AAC Asn TTC Phe	Val 15 ATT Ile GGC Gly CAG Gln CTG Leu	TTA Leu CTA Leu GTC Val GCG Ala 80	96 144 192 240

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

6167 6168					85					90				IN	<i>PUT</i> 95	SET:	S31474.raw
6169	אאם	A C C	תיתי א	acc	aac	CCA	λλC	aaa	CCA	ATC	N.C.C	CAG	አሞር	ሞልሮ	ልሮሞ	λλΤ	336
6170										Ile							336
6171	цуз	1111	пец	100	СТУ	110	цуs	GLY	105	116	1111	GIII	Mec	110	1111	ASII	
6172				100					103					110			
6173	GTG	GAC	CAG	GAC	стс	GTC	GGC	TGG	CAG	GCG	CCC	CCC	GGG	GCG	CGT	TCC	384
6174										Ala							301
6175		-1.25	115				,	120					125		9		
6176																	
6177	TTG	ACA	CCA	TGC	ACC	TGT	GGC	AGC	TCA	GAC	CTT	TAC	TTG	GTC	ACG	AGA	432
6178										Asp							
6179		130		-		-	135			•		140				•	
6180																	
6181	CAT	GCT	GAC	GTC	ATT	CCG	GTG	CGC	CGG	CGG	GGC	GAC	AGT	AGG	GGG	AGC	480
6182	His	Ala	Asp	Val	Ile	Pro	Val	Arg	Arg	Arg	Gly	Asp	Ser	Arg	Gly	Ser	
6183	145					150					155					160	
6184																	
6185										TTG							528
6186	Leu	Leu	Ser	Pro	Arg	Pro	Val	Ser	Tyr	Leu	Lys	Gly	Ser	Ala	Gly	Gly	
6187					165					170					175		
6188																	
6189										GTG							576
6190	Pro	Leu	Leu	_	Pro	Ser	GTÀ	His		Val	СТĀ	Ile	Phe		Ala	Ala	
6191				180					185					190			
6192	CITE A	maa	100	222	000	amm	999		~~~	ama	a. a	mmm	ama	222	ama	a.a	604
6193										GTG							624
6194 6195	vaı	cys	195	Arg	сту	vaı	АТа		Ата	Val	ASP	Pne		PIO	vaı	GIU	
6196			193					200					205				
6197	TCC	አጥር	GAA	አ ረጣ	አረጣ	አጥር፤	ccc	ጥርጥ	ccc	GTC	ጥጥረ	אכם	GAC	አአሮ	ጥር እ	TCC	672
6198										Val							072
6199	501	210	014			1100	215	501	110	•41	1110	220	nop	AD.	501	501	
6200							210					220					
6201	CCC	CCG	GCC	GTA	CCG	CAG	TCA	TTT	CAA	GTG	GCC	CAC	CTA	CAC	GCT	CCC	720
6202										Val							
6203	225					230					235					240	
6204																	
6205	ACT	GGC	AGC	GGC	AAG	AGT	ACT	AAA	GTG	CCG	GCT	GCA	TAT	GCA	GCC	CAA	768
6206	Thr	Gly	Ser	Gly	Lys	Ser	Thr	Lys	Val	Pro	Ala	Ala	Tyr	Ala	Ala	Gln	
6207					245					250					255		
6208																	
6209										TCC							816
6210	Gly	Tyr	Lys		Leu	Val	Leu	Asn		Ser	Val	Ala	Ala	Thr	Leu	Gly	
6211				260					265					270			
6212								<u></u>	<b></b> .				<b></b>				
6213										GGT							864
6214	Phe	GТÀ		Tyr	Met	Ser	Lys		His	Gly	Ile	Asp		Asn	Ile	Arg	
6215			275					280					285				
6216	3.00	~~~	am.	3.00						000		am		m > ~	m~~		010
6217										GCC							912
6218	inr	-	vат	arg	THE	тте		inr	σТΆ	Ala	PIO		ınr	туг	ser	THE	
6219		290					295					300					

## RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

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														II	PUI	SEI: S	314/4.raw
6220 6221		GGC	AAG	ттт	СТТ	GCC	GAT	GGT	GGT	TGC	TCT	GGG	GGC	GCT	тат	GAC	960
6222											Ser						
6223	_	-	•			310	•	-	•	•	315	•	-		-	320	
6224																	
6225		АТА	ATA	TGT	GAT	GAG	TGC	CAT	TCA	ACT	GAC	TCG	ACT	ACA	ATC	TTG	1008
6226											Asp						
6227				<b>4</b>	325		-7-			330	p	201			335		
6228					020												
6229		ልጥሮ	GGC	ΔCΔ	GTC	СТС	GAC	CAA	GCG	GAG	ACG	CCT	GGA	gcg	CGG	Стт	1056
6230											Thr						2000
6231	_	110	CTY	340	Val	Lea	ASP	Q±	345	014	****	AIG	O.L.y	350	<b></b> 9	БСС	
6232				340					313					330			
6233		GTG	CTC	acc	A C C	сст	ACG	ССТ	CCG	GGA	TCG	CTC	ACC	стс	CCA	CAC	1104
6234											Ser						1104
6235		Val	355	MIG	1111	ATG	1111	360	PIO	сту	Ser	Val	365	Val	PIO	птэ	
6236			333					300					303				
6237		220	а пт	ava	CAC	OTH C	aaa	CITICS.	mam	3 3 III	ACT	CCA	CAC	N TO C	aaa	mma.	1152
																	1132
6238			тте	GIU	GIU	Val		Leu	ser	ASn	Thr	_	GIU	тте	PIO	Pne	
6239		370					375					380					
6240		aaa		000	. m.a	aaa	3 mm	a.,	000	3 ma		~~~	<b>aa</b> .		~ m	ama	1000
6241											AGG						1200
6242	_	сту	ьys	а⊥а	тте		тте	GIU	АТа	тте	Arg	GTĀ	GTÀ	arg	HIS		
6243						390					395					400	
6244																	
6245							-			-	GAG						1248
6246		Phe	Cys	His		Lys	Lys	Lys	Cys		Glu	Leu	Ala	АТа	-	Leu	
6247					405					410					415		
6248			0														
6249											TAC						1296
6250		GTÀ	Leu	_	Ile	Asn	Ala	Val		Tyr	Tyr	Arg	GTÀ		Asp	Val	
6251				420					425					430			
6252																	_
6253											GTC						1344
6254		Val		Pro	Thr	Ile	Gly	Asp	Val	Val	Val	Val	Ala	Thr	Asp	Ala	
6255			435					440					445				
6256																	
6257											TCA						1392
6258		Met	Thr	Gly	Tyr	Thr	Gly	Asp	Phe	Asp	Ser	Val	Ile	Asp	Cys	Asn	
6259		450					455					460					
6260																	
6261											TTG						1440
6262		Cys	Val	Thr	Gln	Thr	Val	Asp	Phe	Ser	Leu	Asp	Pro	Thr	Phe	Thr	
6263						470					475					480	
6264																	
6265											GTG						1488
6266		Glu	Thr	Thr	Thr	Val	Pro	Gln	Asp	Ala	Val	Ser	Arg	Ser	Gln	Arg	
6267					485				_	490					495		
6268																	
6269	CGG	GGT	AGG	ACT	GGC	AGG	GGT	AGG	AGA	GGC	ATC	TAC	AGG	TTT	GTG	ACT	1536
6270	Arg	Gly	Arg	Thr	Gly	Arg	Gly	Arg	Arg	Gly	Ile	Tyr	Arg	Phe	Val	Thr	
6271		_	_	500	_	_	-	_	505	-		-	_	510			
6272																	

## RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

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6275		-	515	_			-	520		-			525		_		
6276																	
6277	TGC	TAT	GAC	GCG	GGC	TGT	GCT	TGG	TAC	GAG	CTC	ACC	CCC	GCC	GAG	ACC	1632
6278								Trp									
6279	- , -	530	E		1	-1-	535	<b>F</b>	- 7 -			540					
6280												0.10					
6281	TCG	ርጥጥ	ΔGG	ጥጥር	CGG	GCC	TAC	CTG	AAC	ACA	CCA	aaa	ጥጥር	CCC	ርጥጥ	TGC	1680
6282								Leu									1000
6283	545	VUI	AL 9	Бес	AL 9	550	- 7 -	пса	ASII	****	555	Gry	пеа	110	Val	560	
6284	343					550					333					500	
6285	CAG	GVC	CAC	CTC	GAG	ጥጥረ	таа	GAG	λcm	GT/C	ጥጥረ	אמא	aaa	CTC	אככ	CATT	1728
6286								Glu									
6287	GIII	ASP	птэ	Leu	565	FIIE	тър	GIU	ser		Pne	1111	сту	ьeu		urs	
					363					570					575		
6288	3 m 3	~ . m		a.a	mma	mma	maa	a.a	3.00		a.a	<b>aa</b> .	aa.	a.a		mma	1776
6289								CAG									1776
6290	тте	Asp	АТА		Pne	Leu	ser	Gln		гàг	GIn	Ala	GTÀ		Asn	Pne	
6291				580					585					590			
6292																	
6293								GCC									1824
6294	Pro	Tyr		Val	Ala	Tyr	Gln	Ala	Thr	Val	Cys	Ala	Arg	Ala	Gln	Ala	
6295			595					600					605				
6296																	
6297	CCA	CCT	CCA	TCA	TGG	GAT	CAA	ATG	TGG	AAG	TGT	CTC	ATA	CGG	CTG	AAA	1872
6298	Pro	Pro	Pro	Ser	Trp	Asp	Gln	Met	Trp	Lys	Cys	Leu	Ile	Arg	Leu	Lys	
6299		610					615					620					
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6301	CCT	ACG	CTG	CAC	GGG	CCA	ACA	CCC	TTG	CTG	TAC	AGG	CTG	GGA	GCC	GTC	1920
6302	Pro	Thr	Leu	His	Gly	Pro	Thr	Pro	Leu	Leu	Tyr	Arg	Leu	Gly	Ala	Val	
6303	625					630					635					640	
6304																	
6305	CAA	AAT	GAG	GTC	ACC	CTC	ACC	CAC	CCC	ATA	ACC	AAA	TAC	ATC	ATG	GCA	1968
6306	Gln	Asn	Glu	Val	Thr	Leu	Thr	His	Pro	Ile	Thr	Lys	Tyr	Ile	Met	Ala	
6307					645					650		-	-		655		
6308																	
6309	TGC	ATG	TCG	GCT	GAC	CTG	GAG	GTC	GTC	ACT							1998
6310								Val									
6311	- 3			660					665			INFO	RMATI	CON I	OR S	SEO I	D NO:110:
6312										_	-, -					z -	
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															IN	PUT	SET: S	31474.raw	
	6326			(1	B) L(	CAT:	ION:	12	2016										
	6327			•	-, -														
	6328																		
>	6329		(xi	SEC	MEN	CE DI	ESCR.	[PTI	N: 5	SEO 1	TD NO	2:11	٠.						
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	6331	ΔТС	aac	AGC	AGC	СУТ	СУТ	CAT	САТ	СУП	CAC	AGC	AGC	aac	CTG	GTG.	CCG	4	Ω
	6332							His											9
	6333	1	СТУ	Der	Ser	5	1113	1113	1113	111.5	10	Ser	Ser	GLY	ьец	15	FIO		
	6334	_				3					10					13			
		aaa		3.00	C A III	х птст	ааш	ma.c	mam	ama	» cm	3.00	aam	mam	amm	amm	» mm	0.	_
	6335 6336							TAC										90	5
		Arg	сту	Ser		мес	Ата	Tyr	Ser		THE	The	GTÄ	ser		vaı	тте		
	6337 6338				20					25					30				
		amm	aam	202	200	3 mm	mm »	mam	aam.	) am	aam.	. am	<b>.</b>		<b>a</b> aa	m. a	шаа		
	6339							TCT										14	4
	6340	vaı	GTA		тте	тте	Leu	Ser		ser	GTA	ser	тте		АТа	Tyr	ser		
	6341			35					40					45					
	6342				~~~		~=.												_
	6343							CTT										19:	2
	6344	GIn		Thr	Arg	GTÄ	Leu	Leu	GTA	Cys	IIe	Ile		Ser	Leu	Thr	СТĀ		
	6345		50					55					60						
	6346																		_
	6347							GAG										24	0
	6348	_	Asp	Lys	Asn	Gln		Glu	Gly	Glu	Val	Gln	Val	Val	Ser	Thr			
	6349	65					70					75					80		
	6350																		
	6351							ACC										28	8
	6352	Thr	Gln	Ser	Phe	Leu	Ala	Thr	Cys	Val	Asn	Gly	Val	Cys	Trp	Thr	Val		
	6353					85					90					95			
	6354																		
	6355	TAC	CAT	GGT	GCT	GGC	TCA	AAG	ACC	TTA	GCC	GGC	CCA	AAG	GGG	CCA	ATC	33	6
	6356	Tyr	His	Gly	Ala	Gly	Ser	Lys	Thr	Leu	Ala	Gly	Pro	Lys	Gly	Pro	Ile		
	6357				100					105					110				
	6358																		
	6359	ACC	CAG	ATG	TAC	ACT	AAT	GTG	GAC	CAG	GAC	CTC	GTC	GGC	TGG	CAG	GCG	384	4
	6360	Thr	Gln	Met	Tyr	Thr	Asn	Val	Asp	Gln	Asp	Leu	Val	Gly	Trp	Gln	Ala		
	6361			115					120					125					
	6362																		
	6363	CCC	CCC	GGG	GCG	CGT	TCC	TTG	ACA	CCA	TGC	ACC	TGT	GGC	AGC	TCA	GAC	43	2
	6364	Pro	Pro	Gly	Ala	Arg	Ser	Leu	Thr	Pro	Cys	Thr	Cys	Gly	Ser	Ser	Asp		
	6365		130					135					140						
	6366																		
	6367	CTT	TAC	TTG	GTC	ACG	AGA	CAT	GCT	GAC	GTC	ATT	CCG	GTG	CGC	CGG	CGG	48	0
	6368	Leu	Tyr	Leu	Val	Thr	Arq	His	Ala	Asp	Val	Ile	Pro	Val	Arq	Arq	Arq		
	6369	145	-				150			_		155			_	_	160		
	6370																		
	6371	GGC	GAC	AGT	AGG	GGG	AGC	CTG	CTC	TCC	CCC	AGG	CCT	GTC	TCC	TAC	TTG	52	8 .
	6372							Leu										- <del>-</del>	
	6373	-1	- E		- 5	165					170	3				175	<b>-</b>		
	6374										•							•	
	6375	AAC	GGC	тст	TCG	GGT	GGT	CCA	ста	СТС	TGC	ССТ	TCG	GGG	CAC	GCT	GTG	57	6
	6376							Pro										37.	-
	6377	-,-	1		180	1	1			185	-,5		~~_	1	190				
	6378				-50					100					1)0				
	33,0																		

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999 TIME: 11:22:52

														111	TUI	SEI:	331474.ruw
6379	GGC	ATC	TTC	CGG	GCT	GCC	GTA	TGC	ACC	CGG	GGG	GTT	GCG	AAG	GCG	GTG	624
6380	Gly	Ile	Phe	Arg	Ala	Ala	Val	Cys	Thr	Arg	Gly	Val	Ala	Lys	Ala	Val	
6381			195					200					205				
6382																	
6383	GAC	TTT	GTG	CCC	GTA	GAG	TCC	ATG	GAA	ACT	ACT	ATG	CGG	TCT	CCG	GTC	672
6384						Glu											· · -
6385	шър	210			,		215					220	9	202			
6386		210					213					220					
	mma	3.00	<b>a</b> a	330	ma s	maa	aaa	aaa	999	am s	000	asa	mas	mmm	<b>CIR</b> 3	ama.	720
6387																GTG	720
6388		Thr	Asp	Asn	Ser	Ser	Pro	Pro	Ата	val		GIN	ser	Pne	GIN		
6389	225					230					235					240	
6390																	
6391	GCC	CAC	CTA	CAC	GCT	CCC	ACT	GGC	AGC	GGC	AAG	AGT	ACT	AAA	GTG	CCG	768
6392	Ala	His	Leu	His	Ala	Pro	Thr	Gly	Ser	Gly	Lys	Ser	Thr	Lys	Val	Pro	
6393					245					250					255		
6394																	
6395	GCT	GCA	TAT	GCA	GCC	CAA	GGG	TAC	AAG	GTG	CTC	GTC	CTC	AAT	CCG	TCC	816
6396	Ala	Ala	Tyr	Ala	Ala	Gln	Gly	Tyr	Lys	Val	Leu	Val	Leu	Asn	Pro	Ser	
6397			-	260			_	_	265					270			•
6398																	
6399	GTT	GCC	GCT	ACC	TTA	GGG	TTT	GGG	GCG	TAT	ATG	TCT	AAG	GCA	CAC	GGT	864
6400						Gly											
6401			275			1		280		- 1 -			285			1	
6402			2,0					200									
6403	א ייייי	GAC	כככ	AAC	ልጥሮ	AGA	ΔСТ	GGG	сπν	ΔGG	ACC	<b>λ</b> ΨΨ	ACC	ACA	GGC	GCC	912
6404						Arg											712
6405	116	290	FIO	ASII	116	Arg	295	GLY	Val	ALG	1111	300	1111	1111	GLY	AIG	
		290					293					300					
6406	000	ama	202	шас	mam	3.00	mam	000	220	mmm	amm	000	CAM	aam	O O III	шаа	060
6407						ACC											960
6408		vaı	Thr	Tyr	ser	Thr	Tyr	СТА	гÀг	Pne		АТа	Asp	GTA	GTÀ		
6409	305					310					315					320	
6410																	
6411						GAC											1008
6412	Ser	GTÀ	СТĀ	Ala	_	Asp	IIe	Ile	IIe		Asp	GLu	Cys	His		Thr	
6413					325					330					335		
6414																	
6415						TTG											1056
6416	Asp	Ser	Thr	Thr	Ile	Leu	Gly	Ile	Gly	Thr	Val	Leu	Asp	Gln	Ala	Glu	
6417				340					345					350			
6418																	
6419	ACG	GCT	GGA	GCG	CGG	CTT	GTC	GTG	CTC	GCC	ACC	GCT	ACG	CCT	CCG	GGA	1104
6420	Thr	Ala	Gly	Ala	Arg	Leu	Val	Val	Leu	Ala	Thr	Ala	Thr	Pro	Pro	Gly	
6421			355					360					365				
6422																	
6423	TCG	GTC	ACC	GTG	CCA	CAC	CCA	AAC	ATC	GAG	GAG	GTG	GCC	CTG	TCT	AAT	1152
6424						His											
6425		370					375					380					
6426		_ , 🗸					<b>-</b>										
6427	ΔСΨ	GGA	GAG	ΔͲሮ	מממ	TTC	тдπ	GGC	ΔΛΛ	מממ	ΔͲሮ	כככ	א חיחי	GAD	מכר.	ΔͲሮ	1200
6428						Phe											1200
6429	385	O T Y	JIU	-16	110	390	- y -	OT A	пyэ	лда	395	110	*TG	JIU	n.u	400	
6430	505					390					593					<b>400</b>	
	N CC	aaa	CC 3	N.C.C	СУШ	CITIC	y mm	TI TI TI	mar.	CI A TO	шаа	224	224	224	TOO	CAC	1240
6431	AGG	GGG	GGA	AGG	CAT	CTC	ATT	TTC	IGI	CAT	100	AAG	AAG	AAG	IGC	GAC	1248

### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

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														II	PUI	3E1: 331	4/4.raw
6432 6433 6434	Arg	Gly	Gly	Arg	His 405	Leu	Ile	Phe	Cys	His 410	Ser	Lys	Lys	Lys	Cys 415	Asp	
6435	G A G	аша	aaa	aa x	220	ama	ma x	000	ama	aax	х ПС	224	aam	ama	aaa	mam	1296
6436			GCC														1296
	GIU	Leu	Ala		rys	Leu	Ser	сту		GIŞ	тте	ASn	Ата		ATG	Tyr	
6437				420					425					430			
6438	mag	aaa	~~~	ama	G N III	ama	maa	ama		~~~			~~*	a.a	ama	amm.	3 2 4 4
6439			GGG														1344
6440	Tyr	Arg	Gly	Leu	Asp	vaı	ser		тте	Pro	Thr	тте	_	Asp	vат	vaı	
6441			435					440					445				
6442	ama	аша	aa.	2012	a.a	aam	ama	3 111 (1	3.00	000	m s m		000	a.a	mmm	a.a	1200
6443			GCA														1392
6444	vaı		Ala	THE	ASP	АТА		мес	THE	СТУ	Tyr		сту	ASP	Pne	Asp	
6445		450					455					460					
6446 6447	шал	аша	ATC	CAC	mam	220	202	тат	ama	3.00	ana	202	ama	ana	mma	* 00	1440
6448			Ile														1440
6449	465	Val	TTE	ASP	Cys	470	1111	Cys	vaı	1111	475	1111	vaı	ASP	FIIE	480	
6450	403					4/0					4/7					400	
6451	ጥጥረ፤	СУТ	CCC	እሮሮ	ጥጥሮ	ልሮሮ	א יוייני א	GAG	A C C	ACG	אממ	стс	C C	מאא	GAC	CCA	1488
6452			Pro														1400
6453	пец	иор	110	****	485	*111	110	GLU	1111	490	1111	Val	110	0111	495	TIG	
6454					103					470					473		
6455	GTG	TCG	CGC	TCG	CAG	CGG	CGG	GGT	AGG	ΔСТ	GGC	AGG	GGT	ΔGG	AGA	GGC	1536
6456			Arg														1000
6457			9	500	<b></b>	9	9	1	505			•••- 5		510	9	011	
6458																	
6459	ATC	TAC	AGG	ттт	GTG	ACT	CCG	GGA	GAA	CGG	ccc	TCG	GGC	ATG	TTC	GAT	1584
6460			Arg														
6461		- 2 -	515					520		5			525			<i>F</i>	
6462																	
6463	TCC	TCG	GTC	CTG	TGT	GAG	TGC	TAT	GAC	GCG	GGC	TGT	GCT	TGG	TAC	GAG	1632
6464	Ser	Ser	Val	Leu	Cys	Glu	Cys	Tyr	Asp	Ala	Gly	Cys	Ala	Trp	Tyr	Glu	
6465		530			-		535	-	-		-	540		-	-		
6466																	
6467	CTC	ACC	CCC	GCC	GAG	ACC	TCG	GTT	AGG	TTG	CGG	GCC	TAC	CTG	AAC	ACA	1680
6468	Leu	Thr	Pro	Ala	Glu	Thr	Ser	Val	Arg	Leu	Arg	Ala	Tyr	Leu	Asn	Thr	
6469	545					550					555					560	
6470																	
6471			TTG														1728
6472	Pro	Gly	Leu	Pro	Val	Cys	Gln	Asp	His	Leu	Glu	Phe	Trp	Glu	Ser	Val	
6473					565					570					575		
6474																	
6475			GGC														1776
6476	Phe	Thr	Gly		Thr	His	Ile	Asp		His	Phe	Leu	Ser	Gln	Thr	Lys	
6477				580					585					590			
6478																	
6479			GGA														1824
6480	Gln	Ala	Gly	Asp	Asn	Phe	Pro	_	Leu	Val	Ala	Tyr		Ala	Thr	Val	
6481			595					600					605				
6482					<b></b>												
6483			AGG														1872
6484	Cys	Ala	Arg	Ala	Gln	Ala	Pro	Pro	Pro	Ser	Trp	Asp	Gln	Met	Trp	Lys	

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

															IN	PUT	SET: S	S31474.raw	
	6485		610					615					620						
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	6488														Pro				
	6489	625					630					635					640		
	6490																		
	6491	TAC	AGG	CTG	GGA	GCC	GTC	CAA	AAT	GAG	GTC	ACC	CTC	ACC	CAC	CCC	ATA	1968	
	6492														His				
	6493	-	,		-	645					650					655			
	6494																		
	6495	ACC	AAA	TAC	ATC	ATG	GCA	TGC	ATG	TCG	GCT	GAC	CTG	GAG	GTC	GTC	ACT	2016	
	6496	Thr	Lys	Tyr	Ile	Met	Ala	Cys	Met	Ser	Ala	Asp	Leu	Glu	Val	Val	Thr		
	6497		-	•	660			•		665		-			670				
	6498																		
-74(L	6499	(2)	INF	ORMA'	<b>TION</b>	FOR	SEQ	ID I	NO:1	11:									
<b>U</b> (-	6500																		
	6501		(i	) SE(	QUEN	CE CI	HARA	CTER:	ISTI	CS:									
	6502			( 1	A) LI	engti	H: 20	016 l	base	pair	rs								
	6503			( I	B) T	YPE:	nuc:	leic	acio	Ē									
	6504						DEDN			gle									
	6505			(1	D) T(	OPOL	OGY:	line	ear										
	6506																		
	6507		(ii)	) MOI	LECU	LE T	YPE:	CDN	A										
	6508																		
	6509																		
	6510		(ix)	) FE <i>I</i>	ATURI	Ε:													
	6511			( )	A) N	AME/I	KEY:	CDS											
	6512			( I	B) L(	OCAT:	ION:	1	2016										
	6513																		
	6514																		
	6515		(xi	) SE(	QUEN	CE DI	ESCR:	IPTI	on:	SEQ :	ID NO	0:11	1:						
	6516																		
	6517														CTG			48	
	6518		GTÀ	Ser	Ser		His	His	His	His		Ser	Ser	GTÀ	Leu		Pro		
	6519	1				5					10					15			
	6520	~~~	000		a	<b>.</b>		m • -	me-	a=-				me=				• •	
	6521														GTT			96	
	6522	Arg	GŢĀ	ser		мet	Ala	Tyr	Ser		Thr	Thr	GTÀ	Ser	Val	Val	Ile		
	6523				20					25					30				
	6524	ae	~~~					m	a		~~=					<b></b>	ma		
	6525														GCC			144	
	6526	vaı	СΤĀ		тте	тте	ьeu	ser		ser	GTĀ	ser	тте		Ala	Tyr	ser		
	6527			35					40					45					
	6528	<b>a.</b> .	a			~~~	a=-		~~~	m~~					~		~~~		
	6529														CTT			192	
	6530	GIn		Thr	Arg	GŢĀ	Leu		GTÀ	Cys	ITe	Ile		Ser	Leu	Thr	GТÀ		
	6531		50					55					60						
	6532	~~~	~				<b>a</b> = -		<b></b>				a= -						
	6533														TCC			240	
	6534		Asp	Lys	Asn	GIn		Glu	GLY	GLu	Val		Val	Va⊥	Ser	Thr			
	6535	65					70					75					80		
	6536																		

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999 TIME: 11:22:53

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6537	ACA	CAA	TCC	TTC	CTG	GCG	ACC	TGC	GTC	AAC	GGC	GTG	TGT	TGG	ACC	GTT	288
6538	Thr	Gln	Ser	Phe	Leu	Ala	Thr	Cys	Val	Asn	Gly	Val	Cys	Trp	Thr	Val	
6539					85			-		90	-		_	_	95		
6540																	
6541	TAC	CAT	GGT	GCT	GGC	TCA	AAG	ACC	TTA	GCC	GGC	CCA	AAG	GGG	CCA	ATC	336
6542						Ser										_	
6543	- 3 -	1120	017	100	01,	201	2,5		105		01,		_,_	110			
6544				100					103					110			
6545	N.C.C	CAC	» ma	mad	х стр	AAT	СПС	CAC	CAC	CAC	CTC.	OTO C	aaa	maa.	CAC	aca	384
6546						Asn											304
	1111	GIII		туг	1111	AŞII	var	120	GIII	ASP	геп	vaı	125	тър	GIII	Ата	
6547			115					120					123				
6548	000	aaa	000	000	COM	TCC	mma	202	aas	maa	* 00	mam	000		ma s	ana	422
6549																	432
6550	Pro		GTA	АТА	Arg	Ser		THE	PIO	Cys	THE		GTÅ	ser	Ser	Asp	
6551		130					135					140					
6552	~~~						~~~		a.a	ama			ama		~~~	~~~	400
6553						AGA											480
6554		Tyr	Leu	Val	Thr	Arg	His	ATa	Asp	vaı		Pro	Val	Arg	Arg		
6555	145					150					155					160	
6556																	
6557						AGC											528
6558	Gly	Asp	Ser	Arg		Ser	Leu	Leu	Ser		Arg	Pro	Va⊥	Ser		Leu	
6559					165					170					175		
6560																	
6561						GGT											576
6562	Lys	Gly	Ser	Ala	Gly	Gly	Pro	Leu	Leu	Cys	Pro	Ser	$\mathtt{Gly}$	His	Ala	Val	
6563				180					185					190			
6564																	
6565						GCC											624
6566	Gly	Ile	Phe	Arg	Ala	Ala	Val	Cys	Thr	Arg	Gly	Val	Ala	Lys	Ala	Val	
6567			195					200					205				
6568																	
6569	GAC	TTT	GTG	CCC	GTA	GAG	TCC	ATG	GAA	ACT	ACT	ATG	CGG	TCT	CCG	GTC	672
6570	Asp	Phe	Val	Pro	Val	Glu	Ser	Met	Glu	Thr	Thr	Met	Arg	Ser	Pro	Val	
6571		210					215					220					
6572																	
6573	TTC	ACG	GAC	AAC	TCA	TCC	CCC	CCG	GCC	GTA	CCG	CAG	TCA	TTT	CAA	GTG	720
6574	Phe	Thr	Asp	Asn	Ser	Ser	Pro	Pro	Ala	Val	Pro	Gln	Ser	Phe	Gln	Val	
6575	225		-			230					235					240	
6576																	
6577	GCC	CAC	CTA	CAC	GCT	CCC	ACT	GGC	AGC	GGC	AAG	AGT	ACT	AAA	GTG	CCG	768
6578	Ala	His	Leu	His	Ala	Pro	Thr	Gly	Ser	Gly	Lys	Ser	Thr	Lys	Val	Pro	
6579					245			-		250	-			-	255		
6580																	
6581	GCT	GCA	TAT	GCA	GCC	CAA	GGG	TAC	AAG	GTG	CTC	GTC	CTC	AAT	CCG	TCC	816
6582						Gln											_
6583				260			-1		265					270			
6584				•													
6585	GТT	GCC	GCT	ACC	тта	GGG	фф	GGG	GCG	ТАТ	ATG	тст	AAG	GCA	CAC	GGT	864
6586						Gly											004
6587		<u>.</u> u	275		u	~±y	1 .10	280		- 1 -		~~1	285			1	
6588			2,3					200					200				
6589	עיייי ע	GAC	מממ	ΔΔα	ΔͲሮ	AGA	ልሮሞ	GGG	GФЪ	AGG	ACC	Δጥጥ	ACC	۵۵۵	GGC	GCC	912
0007	VII	OAC		AAC	AIC	AUA	AC I		OIA	700	ACC	W1 1	ACC	AVA	-550	555	7 1 2

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DATE: 04/15/1999 TIME: 11:22:53

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6592																	
6593						ACC											960
6594	Pro	Val	Thr	Tyr	Ser	Thr	Tyr	Gly	Lys	Phe	Leu	Ala	Asp	Gly	Gly	Cys	
6595	305					310					315					320	
6596																	
6597	TCT	GGG	GGC	GCT	TAT	GAC	ATC	ATA	ATA	TGT	GAT	GAG	TGC	CAT	TCA	ACT	1008
6598	Ser	Gly	Gly	Ala	Tyr	Asp	Ile	Ile	Ile	Cys	Asp	Glu	Cys	His	Ser	Thr	
6599					325					330					335		
6600																	
6601						TTG											1056
6602	Asp	Ser	Thr	Thr	Ile	Leu	Gly	Ile	Gly	Thr	Val	Leu	Asp	Gln	Ala	Glu	
6603				340					345					350			
6604															•		
6605						CTT											1104
6606	Thr	Ala	Gly	Ala	Arg	Leu	Val	Val	Leu	Ala	Thr	Ala	Thr	Pro	Pro	Gly	
6607			355					360					365				
6608																	
6609						CAC											1152
6610	Ser		Thr	Val	Pro	His		Asn	Ile	Glu	Glu	Val	Ala	Leu	Ser	Asn	
6611		370					375					380					
6612																	
6613						TTC											1200
6614		Gly	Glu	Ile	Pro	Phe	Tyr	Gly	Lys	Ala		Pro	Ile	Glu	Ala		
6615	385					390					395					400	
6616										~							1010
6617						CTC											1248
6618	arg	GTÀ	GTĀ	Arg		Leu	тте	Pne	cys		ser	гàг	rys	гÀг	_	Asp	
6619					405					410					415		
6620	a a a	ama	aaa	003	330	CTG	шаз	000	ата	aas	a ma	330	aam	аша	000	mam	1296
6621 6622																	1296
6623	GIU	nea	мта	420	цуз	Leu	Ser	GIY	425	GLY	116	ASII	АТа	430	Ата	ıyı	
6624				420					423					430			
6625	ጥልሮ	ccc	aga	מידים	САТ	GTG	<b>חרכ</b>	GTC	ΔπΔ	CCA	ΔСТ	ΔͲሮ	GGA	CAC	CTC	GTT	1344
6626						Val											1011
6627	- 7 -	9	435			,		440					445			,,,	
6628													110				
6629	GTC	GTG	GCA	ACA	GAC	GCT	CTG	ATG	ACG	GGC	ТАТ	ACG	GGC	GAC	ттт	GAC	1392
6630						Ala											
6631		450					455			3	- 3 -	460	2				
6632		-										-					
6633	TCA	GTG	ATC	GAC	TGT	AAC	ACA	TGT	GTC	ACC	CAG	ACA	GTC	GAC	TTC	AGC	1440
6634						Asn											
6635	465			-	-	470		-			475			-		480	
6636									•								
6637	TTG	GAT	CCC	ACC	TTC	ACC	ATT	GAG	ACG	ACG	ACC	GTG	CCT	CAA	GAC	GCA	1488
6638	Leu	Asp	Pro	Thr	Phe	Thr	Ile	Glu	Thr	Thr	Thr	Val	Pro	Gln	Asp	Ala	
6639					485					490					495		
6640																	
6641						CGG											1536
6642	Val	Ser	Arg	Ser	Gln	Arg	Arg	Gly	Arg	Thr	Gly	Arg	Gly	Arg	Arg	Gly	

6694

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														IN	<i>PUT</i>	SET:	S31474.raw
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6644																	
6645							CCG										1584
6646	Ile	Tyr	Arg	Phe	Val	Thr	Pro	Gly	Glu	Arg	Pro	Ser	Gly	Met	Phe	Asp	
6647			515					520					525				
6648																	
6649							TGC									_	1632
6650	Ser		Val	Leu	Cys	Glu	Cys	Tyr	Asp	Ala	Gly	_	Ala	Trp	Tyr	Glu	
6651		530					535					540					
6652																	
6653							TCG										1680
6654		Thr	Pro	Ala	GIU		Ser	vaı	Arg	Leu	_	Ala	Tyr	Leu	Asn		
6655	545					550					555					560	
6656	<b>aa</b> 3	000	mma	000	amm.	maa	a.a	<b>a</b>	a.a	ama	a 2 a	mma	maa	a.a	a com	ama	1720
6657							CAG										1728
6658 6659	PLO	СТУ	Leu	PIO	565	Cys	Gln	ASP	urs	570	GIU	Pne	тър	GIU	575	vaı	
6660					363					370					3/3		
6661	ጥጥረ	אמא	aac	CTC	አሮሮ	ראידי	ATA	CAT	CCA	מאמ	ጥጥረ	ההנה	<b>יי</b> יכי	CAG	NCC.	AAG	1776
6662							Ile										1770
6663	riie	1111	GLY	580	1111	1115	116	rsb	585	1115	1110	Беа	561	590	****	2,5	
6664				500					500								
6665	CAG	GCA	GGA	GAC	AAC	TTC	CCC	TAC	CTG	GTA	GCA	TAC	CAA	GCC	ACG	GTG	1824
6666							Pro										
6667			595	F				600				-1-	605				
6668																	
6669	TGC	GCC	AGG	GCT	CAG	GCC	CCA	CCT	CCA	TCA	TGG	GAT	CAA	ATG	TGG	AAG	1872
6670	Cys	Ala	Arg	Ala	Gln	Ala	Pro	Pro	Pro	Ser	Trp	Asp	Gln	Met	Trp	Lys	
6671	-	610	_				615				_	620			_		
6672																	
6673	TGT	CTC	ATA	CGG	CTG	AAA	CCT	ACG	CTG	CAC	GGG	CCA	ACA	CCC	TTG	CTG	1920
6674	Cys	Leu	Ile	Arg	Leu	Lys	Pro	Thr	Leu	His	Gly	Pro	Thr	Pro	Leu	Leu	
6675	625					630					635					640	
6676																	
6677							CAA										1968
6678	Tyr	Arg	Leu	Gly		Val	Gln	Asn	Glu		Thr	Leu	Thr	His		Ile	
6679					645					650					655		
6680											<b></b>	a					00
6681							TGC										2016
6682	Thr	Lys	Tyr		Met	Ala	Cys	Met		ATa	Asp	Leu	GIU		Val	Thr	
6683				660					665					670			
6684																	
6685	12	TNI	FORM	יחדת	V FOI	R SEC	Q ID	NO:	112:								T
6686	( 2	, 1111	. 021111		. 201		× 10										
6687		ίi	) SEC	OUEN	CE CI	HARAG	CTER:	ISTIC	cs:								
6688		` -	•	_			48 ba			5							
6689							leic			-							
6690																	
6691	, ,																
6692			•	•													
6693		(ii	) MOI	LECUI	LE T	YPE:	CDN	Ą									
6691		•															

## RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

INPUT SET: S31474.raw

														11V	PUI	SE I	3314/4.raw
6695																	
6696		(ix)		ATURI													
6697			•	•	AME/I												
6698			( I	3) L(	CAT	CON:	16	48									
6699																	
6700																	
6701		(xi)	SE	QUEN	CE DE	ESCR	PTIC	on: s	SEQ :	ID NO	0:112	2:					
6702																	
6703	ATG	GGC	AGC	AGC	CAT	CAT	CAT	CAT	CAT	CAC	AGC	AGC	GGC	CTG	GTG	CCG	48
6704	Met	Gly	Ser	Ser	His	His	His	His	His	His	Ser	Ser	Gly	Leu	Val	Pro	
6705	1				5					10					15		
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6707	CGC	GGC	AGC	CAT	ATG	GGT	TCT	GTT	GTT	ATT	GTT	GGT	AGA	ATT	ATT	TTA	96
6708	Arg	Gly	Ser	His	Met	Gly	Ser	Val	Val	Ile	Val	Gly	Arg	Ile	Ile	Leu	
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6712	Ser	Pro	Ala	Gly	Ile	Thr	Ala	Tyr	Ser	Gln	Gln	Thr	Arg	Gly	Leu	Leu	
6713			35	_				40					45	_			
6714																	
6715	GGT	TGC	ATC	ATC	ACT	AGC	CTT	ACA	GGC	CGG	GAC	AAG	AAC	CAG	GTC	GAG	192
6716	Gly	Cys	Ile	Ile	Thr	Ser	Leu	Thr	Gly	Arg	Asp	Lys	Asn	Gln	Val	Glu	
6717	•	50					55		-		_	60					
6718																	
6719	GGA	GAG	GTT	CAG	GTG	GTT	TCC	ACC	GCA	ACA	CAA	TCC	TTC	CTG	GCG	ACC	240
6720	Gly	Glu	Val	Gln	Val	Val	Ser	Thr	Ala	Thr	Gln	Ser	Phe	Leu	Ala	Thr	
6721	65					70					75					80	
6722																	
6723	TGC	GTC	AAC	GGC	GTG	TGT	TGG	ACC	GTT	TAC	CAT	GGT	GCT	GGC	TCA	AAG	288
6724	Cys	Val	Asn	Gly	Val	Cys	Trp	Thr	Val	Tyr	His	Gly	Ala	Gly	Ser	Lys	
6725	_			_	85	_	_			90		_		_	95	_	
6726																	
6727	ACC	TTA	GCC	GGC	CCA	AAG	GGG	CCA	ATC	ACC	CAG	ATG	TAC	ACT	AAT	GTG	336
6728	Thr	Leu	Ala	Gly	Pro	Lys	Gly	Pro	Ile	Thr	Gln	Met	Tyr	Thr	Asn	Val	
6729				100		_	_		105				_	110			
6730																	
6731	GAC	CAG	GAC	CTC	GTC	GGC	TGG	CAG	GCG	CCC	CCC	GGG	GCG	CGT	TCC	TTG	384
6732	Asp	Gln	Asp	Leu	Val	Gly	Trp	Gln	Ala	Pro	Pro	Gly	Ala	Arg	Ser	Leu	
6733	_		115			_	-	120					125				
6734																	
6735	ACA	CCA	TGC	ACC	TGT	GGC	AGC	TCA	GAC	CTT	TAC	TTG	GTC	ACG	AGA	CAT	432
6736	Thr	Pro	Cys	Thr	Cys	Gly	Ser	Ser	Asp	Leu	Tyr	Leu	Val	Thr	Arg	His	
6737		130	•		-	_	135		_		_	140			_		
6738																	
6739	GCT	GAC	GTC	ATT	CCG	GTG	CGC	CGG	CGG	GGC	GAC	AGT	AGG	GGG	AGC	CTG	480
6740	Ala	Asp	Val	Ile	Pro	Val	Arq	Arq	Arq	Gly	Asp	Ser	Arg	Gly	Ser	Leu	
6741	145	- 1				150	,	,	,	-	155		,	-		160	
6742	-					-										-	
6743	CTC	TCC	CCC	AGG	CCT	GTC	TCC	TAC	TTG	AAG	GGC	TCT	TCG	GGT	GGT	CCA	528
6744					Pro												
6745				- 3	165			-		170	-1			- 2	175		
6746																	
6747	СТС	CTC	TGC	CCT	TCG	GGG	CAC	GСT	GTG	GGC	ATC	TTC	CGG	GCT	GCC	GTA	576
				1													5.0

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

														IΛ	PUT	SET: S31474	.raw
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6750																	
6751	TGC	ACC	CGG	GGG	GTT	GCG	AAG	GCG	GTG	GAC	ттт	GTG	CCC	GTA	GAG	TCC	624
6752										Asp							022
6753	0,0		195	01,			_,_	200		p		• • • •	205	, u _		501	
6754			1,7,5					200					203				
6755	አመረ	CAA	አረሞ	አረጥ	አጥር	ccc	TCT	ጥር እ									648
			Thr					IGA	/								040
6756	мес		1111	1111	Met	Arg		4	( )	TNE	````	TTON.	EOD	CEO	TD 1	NO:113:	
6757		210					215		(2)	INE	JKMA.	LION	FOR	PEŌ	ו עד	MO:113:	
6758 6759			CE/	NEED IN	מה מנ	7 A D A C	amean a	ISTIC									
		(1		-						_							
6760			•	•				•	pairs	S							
6761				-				acio									
6762			-	-				sing	ате								
6763			( 1	)) T(	DPOLC	JGY:	line	ear									
6764								_									
6765		(11	) MOI	FECUI	E TY	(PE:	c DNA	4									
6766																	
6767					_												
6768		(ix	) FEA														
6769				-		KEY:											
6770			( I	3) LO	CAT	con:	16	548									
6771						-											
6772		•															
6773		(xi)	) SE(	QUEN	CE DE	ESCR	(PTI	ON: S	SEQ 1	ED NO	):113	3					
6774																	
6775										CAC							48
6776	Met	Gly	Ser	Ser	His	His	His	His	His	His	Ser	Ser	Gly	Leu	Val	Pro	
6777	1				5					10					15		
6778																	
6779										ATT							96
6780	Arg	Gly	Ser	His	Met	Gly	Ser	Val	Val	Ile	Val	Gly	Arg	Ile	Ile	Leu	
6781				20					25					30			
6782																	
6783										CAA							144
6784	Ser	Pro	Ala	Gly	Ile	Thr	Ala	Tyr	Ser	Gln	Gln	Thr	Arg	Gly	Leu	Leu	
6785			35					40					45				
6786																	
6787	GGT	TGC	AAG	ATC	ACT	AGC	CTT	ACA	GGC	CGG	GAC	AAG	AAC	CAG	GTC	GAG	192
6788	Gly	Cys	Lys	Ile	Thr	Ser	Leu	Thr	Gly	Arg	Asp	Lys	Asn	Gln	Val	Glu	
6789		50					55					60					
6790																	
6791	GGA	GAG	GTT	CAG	GTG	GTT	TCC	ACC	GCA	ACA	CAA	TCC	TTC	CTG	GCG	ACC	240
6792	Gly	Glu	Val	Gln	Val	Val	Ser	Thr	Ala	Thr	Gln	Ser	Phe	Leu	Ala	Thr	
6793	65					70					75					80	
6794																	
6795	TGC	GTC	AAC	GGC	GTG	TGT	TGG	ACC	GTT	TAC	CAT	GGT	GCT	GGC	TCA	AAG	288
6796										Tyr							
6797	-			•	85	-	-			90		-		-	95	-	
6798																	
6799	ACC	TTA	GCC	GGC	CCA	AAG	GGG	CCA	ATC	ACC	CAG	ATG	TAC	ACT	ААТ	GTG	336
6800										Thr							
	<b></b>			1		-1-	1						- <i>1</i> -			· <b></b>	

## RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

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6804	Asp	Gln	Asp	Leu	Val	Gly	Trp	Gln	Ala	Pro	Pro	Gly	Ala	Arg	Ser	Leu	
6805	_		115				_	120				_	125	-			
6806																	
6807	ACA	CCA	TGC	ACC	TGT	GGC	AGC	TCA	GAC	CTT	TAC	TTG	GTC	ACG	AGA	CAT	432
6808	Thr	Pro	Cys	Thr	Cys	Gly	Ser	Ser	Asp	Leu	Tyr	Leu	Val	Thr	Arg	His	
6809		130					135					140					
6810																	
6811														GGG			480
6812	Ala	Asp	Val	Ile	Pro	Val	Arg	Arg	Arg	Gly	Asp	Ser	Arg	Gly	Ser	Leu	
6813	145					150					155					160	
6814																	
6815														GGT			528
6816	Leu	Ser	Pro	Arg		Val	Ser	Tyr	Leu	_	Gly	Ser	Ser	Gly		Pro	
6817					165					170					175		
6818																	
6819														GCT			576
6820	Leu	Leu	Cys		Ser	GTĀ	His	Ala		СТĀ	Ile	Phe	Arg	Ala	Ala	Va⊥	
6821				180					185					190			
6822			~~~	~~~											~~~		
6823														GTA			624
6824	cys	Thr	_	GTÀ	vaı	Ата	ьуs		vaı	Asp	Pne	vaı		Val	GLU	ser	
6825			195					200					205				
6826	N THICK	<b>CIA</b> A	» am	3 CI	» ma	000	mam	шал									640
6827				ACT													648
6828 6829	мес		THE	Thr	мес	Arg		,	TNEOI	214 y m 2	TON I	70D (	י משי	D NO	1 1 .		
6830		210					215	(2).	LNFOR	KMAT.	LON I	OR	SEQ.	או עו	):114	ŧ ;	
6831																	
6832		/ i '	SEC	QUEN	יה כו	12 B 20	ים שיחיר	T C TT (	٠.								
6833		`		A) LI						=							
6834			•	B) T					•	•							
6835			•	C) S													
6836			•	D) T				•	,								
6837			•	, -													
6838		(ii	) MOI	LECUI	LE TY	PE:	CDN	A.									
6839		•															
6840																	
6841		(ix	) FE	ATURI	<b>:</b>												
6842				A) NA		KEY:	CDS										
6843			(1	B) L(	CAT	EON:	1	648									
6844																	
6845																	
6846		(xi	) SE	QUEN	CE DI	ESCR:	[PTI	ON: S	SEQ 1	D N	):114	1:					
6847																	
6848														CTG			48
6849	Met	Gly	Ser	Ser	His	His	His	His	His	His	Ser	Ser	Gly	Leu	Val	Pro	
6850	1				5					10					15		
6851	1																
	1 CGC				ATG					АТТ				ATT Ile	ATT		96

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999 TIME: 11:22:55

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6854				20					25					30			
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6857	Ser	Gly	Gly	Ser	Ile	Thr	Ala	Tyr	Ser	Gln	Gln	Thr	Arg	Gly	Leu	Leu	
6858			35					40					45				
6859																	
6860	GGT	TGC	ATC	ATC	ACT	AGC	CTT	ACA	GGC	CGG	GAC	AAG	AAC	CAG	GTC	GAG	192
6861	Gly	Cys	Ile	Ile	Thr	Ser	Leu	Thr	Gly	Arg	Asp	Lys	Asn	Gln	Val	Glu	
6862		50					55					60					
6863																	
6864					GTG												240
6865	Gly	Glu	Val	Gln	Val		Ser	Thr	Ala	Thr		Ser	Phe	Leu	Ala		
6866	65					70					75					80	
6867																	
6868					GTG												288
6869	cys	vaı	Asn	GTÅ	Val	cys	Trp	Thr	vaı	_	His	GTĀ	Ата	GTÀ		ràs	
6870					85					90					95		
6871	100	mm s	000	aaa	CCA	330	aaa	003	3.000	3.00	a 2 a	a má	ma a	» am	3 3 00	ama	226
6872 6873																	336
6874	THE	rea	АТА	100	Pro	гуѕ	СТУ	PIO		1111	GIII	мес	ıyı	110	ASII	vaı	
6875				100					105					110			
6876	CAC	CAC	CAC	OTO.	GTC	aaa	TOO	CAG	aaa	ccc	ccc	aaa	ccc	ССТ	TOO	ጥጥር፤	384
6877					Val												304
6878	АЗР	GIII	115	пец	Val	GLY	111	120	AIG	110	110	Gry	125	Arg	Der.	пеа	
6879			113					120					125				
6880	ACA	CCA	TGC	ACC	TGT	GGC	AGC	TCA	GAC	СТТ	TAC	TTG	GTC	ACG	AGA	CAT	432
6881					Cys												
6882		130	-1-		-1-	1	135				-1-	140			5		
6883																	
6884	GCT	GAC	GTC	ATT	CCG	GTG	CGC	CGG	CGG	GGC	GAC	AGT	AGG	GGG	AGC	CTG	480
6885					Pro												
6886	145	-				150	_	_	_	_	155		_	_		160	
6887																	
6888	CTC	TCC	CCC	AGG	CCT	GTC	TCC	TAC	TTG	AAG	GGC	TCT	TCG	GGT	GGT	CCA	528
6889	Leu	Ser	Pro	Arg	Pro	Val	Ser	Tyr	Leu	Lys	Gly	Ser	Ser	Gly	Gly	Pro	
6890					165					170					175		
6891																	
6892					TCG												576
6893	Leu	Leu	Cys		Ser	Gly	His	Ala		GLy	Ile	Phe	Arg		Ala	Val	
6894				180					185					190			
6895	таа		~~~	~~~	amm	~~~		~~~	ama	a. a		am a	~~~	am 1	~~~	maa	
6896					GTT												624
6897	cys	Thr	_	GIY	Val	Ата	гуѕ		vaı	ASP	Pne	vaı		vaı	GIU	ser	
6898 6899			195					200					205				
	х ша	<b>CA</b> A	мат	мат	a ma	000	шаш	ппст в									640
6900 6901					ATG Met			IGA	/								648
6901	мес	210	TILL	THE	Met	мгд	215	4	(2)	TME	ימאמר	יירטאי	FOD	QE0	י חד	NO:13	15.
6903		210					213		(2)	TME	JEMA.	TTON	FOR	PrΩ	ו עד	, T .	
6904		/ i	) ওদে	) I IE M	CE CI	нара	ים קייף:	TSTT(	75.								
6905		( τ	•	_	ENGT					=							
6006					711011		1 - 2		JULL	-							

6906 (B) TYPE: nucleic acid

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999 TIME: 11:22:55

															IN	<b>PUT</b>	SET: S	S31474.raw
	6907			((	C) S'	TRAN:	DEDNI	ESS:	sind	ale								
	6908			Ċ	D) TO	OPOL	OGY:	line	ear	•								
	6909			, -	, -													
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	6912																	
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	6913		(IX		ATURI			ana										·
	6914						KEY:											
	6915			(1	B) T(	OCAT.	ION:	1	648									
	6916																	
	6917																	
>	6918		(Xi)	) Seq	QUEN	CE DI	ESCR	[PTI	ON: 3	SEQ :	ED NO	0:11	5:					
	6919																	
	6920	ATG	GGC	AGC	AGC	CAT	CAT	CAT	CAT	CAT	CAC	AGC	AGC	GGC	CTG	GTG	CCG	48
	6921	Met	Gly	Ser	Ser	His	His	His	His	His	His	Ser	Ser	Gly	Leu	Val	Pro	
	6922	1				5					10					15		
	6923																	
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	6926		-		20		_			25			-		30			
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	6928	тст	GGT	GGT	TCT	ATC	ACG	GCC	TAC	TCC	CAA	CAG	ACG	CGG	GGC	CTA	CTT	144
	6929						Thr											
	6930	201	011	35	501				40		<b></b>	·	****	45	0_3	200	200	
	6931			33					40					43				
	6932	com	TICC	A A C	አጥሮ	л cm	AGC	CMM	202	aaa	aca	CAC	220	220	CAC	OTT C	CAC	192
	6933																	192
	6934	GLY		гуз	TTE	TIIL	Ser		1111	GTÄ	Arg	ASP	_	ASII	GIN	val	GIU	
			50					55					60					
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	6936						GTT											240
	6937	_	GLu	Val	GIn	Val	Val	Ser	Thr	Ala	Thr		Ser	Phe	Leu	Ala		
	6938	65					70					75					80	
	6939																	
	6940						TGT											288
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	6942					85					90					95		
	6943																	
	6944	ACC	TTA	GCC	GGC	CCA	AAG	GGG	CCA	ATC	ACC	CAG	ATG	TAC	ACT	AAT	GTG	336
	6945	Thr	Leu	Ala	Gly	Pro	Lys	Gly	Pro	Ile	Thr	Gln	Met	Tyr	Thr	Asn	Val	
	6946				100					105					110			
	6947																	
	6948	GAC	CAG	GAC	CTC	GTC	GGC	TGG	CAG	GCG	CCC	CCC	GGG	GCG	CGT	TCC	TTG	384
	6949	Asp	Gln	Asp	Leu	Val	Gly	Trp	Gln	Ala	Pro	Pro	Gly	Ala	Arg	Ser	Leu	
	6950	_		115			_	_	120				_	125	_			
	6951																	
	6952	ACA	CCA	TGC	ACC	TGT	GGC	AGC	TCA	GAC	СТТ	TAC	TTG	GTC	ACG	AGA	CAT	432
	6953						Gly											
	6954		130	- 1 -		- 1 -	1	135				- 1 -	140			9		
	6955																	
	6956	CCT	GAC	СТС	עיייי ע	CCG	GTG	רפת	cec	מפמ	aac	GλC	Δርሞ	N C C	aga	AGC	ርጥር	480
	6957						Val											400
	6958	145	rah	val	TTG	LIO	150	нгд	HT G	ALG	стА		PGI	wid	стў	261	160	
	6959	143					130			•		155					100	
	0 7 3 7																	

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# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

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6960 6961 6962 6963													GGT Gly			528
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6968 6969 6970 6971													GTA Val			624
6972 6973 6974 6975			ACT Thr				TGA	(2)	INFO	ORMAT	rion	FOR	SEQ	ID I	NO:116:	648
6976 6977 6978 6979 6980	(i	(1 (1	QUENCA) LI B) T' C) S' D) TC	ENGTI PE: PRANI	i: 19 nuc] EDNE	941 k Leic ESS:	oase acio sino	pai:	rs							
6982 6983 6984 6985			LECUI		PE:	cDN/	A									
6986 6987 6988 6989 6990	•	(1	ATURI A) NA 3) L(	AME/F	ON:	1										
<b>6991</b> 6992	(XI	) SE(	QUEN	CE DE	ESCRI	[PTI	ON: S	SEQ ]	ED NO	):11	5:					
6993 6994 6995													GGC Gly			48
6996 6997 6998 6999 7000													GGT Gly 30			96
7001 7002 7003 7004													GGA Gly			144
7005 7006 7007 7008													TGC Cys			192
7009 7010 7011 7012													ACC Thr			240

PAGE: 57 ,

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														7.	I <b>PI</b> IT	SET.	S31474.raw
7013	GGC	ממא	AAG	aaa	CCA	ΔͲሮ	ACC	CAG	ልጥር	ጥልሮ	ΔСΨ	አልጥ	GTG.				288
7013					Pro												200
7015	GLY	110	БyS	OLY	85	110	1111	01	Mee	90	****	ADII	Val	иор	95	пор	
7015					05					70					,,		
7017	OTP.C	CTC.	aaa	таа	CAG	aca	CCC	CCC	aaa	aca	ССТ	TO C	ጥጥር	A C A	CCA	TOO	336
7017					Gln												336
	rea	Val	СТУ	_	GIII	АТА	PIO	PIO		АТА	ALG	ser	rea		PIO	Cys	
7019				100					105					110			
7020		mam	999	3.00	ma s	asa	amm.	шас	mma	аша	100		C a m	aam	a.a	ama.	204
7021					TCA												384
7022	Thr	cys	_	ser	Ser	ASP	rea	_	Leu	vaı	THE	Arg		Ата	ASP	vaı	
7023			115					120					125				
7024			a=a		~~~	~~~	~~~	~~~			222		ama	ama	maa		420
7025					CGG												432
7026	тте		vат	Arg	Arg	Arg		Asp	Ser	Arg	СТА		Leu	Leu	Ser	PIO	
7027		130					135					140					
7028											~~=						
7029					TAC												480
7030	_	Pro	Val	ser	Tyr		Lys	GTĀ	Ser	ser	_	GTĀ	Pro	Leu	Leu	_	
7031	145					150					155					160	
7032																	
7033					GCT												528
7034	Pro	Ser	Gly	His	Ala	Val	СТÅ	Ile	Phe	_	Ala	Ala	Val	Cys		Arg	
7035					165					170					175		
7036																	
7037					GCG												576
7038	Gly	Val	Ala	_	Ala	Val	Asp	Phe		Pro	Val	Glu	Ser		Glu	Thr	
7039				180					185					190			
7040																	
7041																GTA	624
7042	Thr	Met	-	Ser	Pro	Val	Phe		Asp	Asn	Ser	Ser		Pro	Ala	Val	
7043			195					200					205				
704 <b>4</b>																	
7045					CAA												672
7046	Pro		Ser	Phe	Gln	Val	Ala	His	Leu	His	Ala	Pro	Thr	Gly	Ser	Gly	
7047		210					215					220					
7048																	
7049					GTG												720
7050	Lys	Ser	Thr	Lys	Val	Pro	Ala	Ala	Tyr	Ala	Ala	Gln	Gly	Tyr	Lys	Val	
7051	225					230					235					240	
7052																	
7053					CCG												768
7054	Leu	Val	Leu	Asn	Pro	Ser	Val	Ala	Ala	Thr	Leu	Gly	Phe	Gly	Ala	Tyr	
7055					245					250					255		
7056																	
7057					CAC												816
7058	Met	Ser	Lys	Ala	His	Gly	Ile	Asp	Pro	Asn	Ile	Arg	Thr	Gly	Val	Arg	
7059				260					265					270			
7060																	
7061	ACC	ATT	ACC	ACA	GGC	GCC	CCC	GTC	ACA	TAC	TCT	ACC	TAT	GGC	AAG	$\mathbf{T}\mathbf{T}\mathbf{T}$	864
7062	Thr	Ile	Thr	Thr	Gly	Ala	Pro	Val	Thr	Tyr	Ser	Thr	Tyr	Gly	Lys	Phe	
7063			275		_			280					285	_	•		
7064																	
7065	CTT	GCC	GAT	GGT	GGT	TGC	TCT	GGG	GGC	GCT	TAT	GAC	ATC	ATA	ATA	TGT	912

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999 TIME: 11:22:56

	_		_			_	_				_	_					5514/4.IUW
7066	Leu		Asp	GTÀ	GTÄ	Cys		GTÀ	GTÀ	АТа	Tyr	_	тте	IIe	тте	cys	
7067		290					295					300					
7068																	
7069	GAT	GAG	TGC	CAT	TCA	ACT	GAC	TCG	ACT	ACA	ATC	TTG	GGC	ATC	GGC	ACA	960
7070	Asp	Glu	Cys	His	Ser	Thr	Asp	Ser	Thr	Thr	Ile	Leu	Gly	Ile	Gly	Thr	
7071	305					310					315					320	
7072																	
7073	GTC	CTG	GAC	CAA	GCG	GAG	ACG	GCT	GGA	GCG	CGG	CTT	GTC	GTG	CTC	GCC	1008
7074						Glu											
7075			<b>F</b>		325					330	5				335		
7076					020												
7077	ACC	сст	ACG	ССТ	CCG	GGA	TCG	GTC	ACC	GTG	CCA	CAC	CCA	ΔΔα	ልጥሮ	GAG	1056
7078						Gly											1030
7079	1111	AIG		340	110	O _T y	501	*41	345	V 0.1	110	1115	110	350	110	GIG	
7080				340					343					330			
7080	ana	ama	000	ama	mam	AAT	» am	aa s	030	» ma	aaa	mma	mam	aaa		aaa	1104
																	1104
7082	GIU	vaı		ьeu	ser	Asn	THE	_	GIU	тте	PIO	Pne	- <del>-</del>	GLY	ьуѕ	АТА	
7083			355					360					365				
7084				<i>a</i>				~~~			~ · ·	ama		mm.a	mam	a.m	
7085						ATC											1152
7086	IIe		IIe	GLu	Ala	Ile	_	GTÀ	GTÀ	Arg	His		IIe	Phe	Cys	His	
7087		370				٠	375					380					
7088												_					
7089						GAC											1200
7090		Lys	Lys	Lys	Cys	Asp	Glu	Leu	Ala	Ala	_	Leu	Ser	Gly	Leu	_	
7091	385					390					395					400	
7092																	
7093	ATC	AAC	GCT	GTG	GCG	TAT	TAC	CGG	GGG	CTC	GAT	GTG	TCC	GTC	ATA	CCA	1248
7094	Ile	Asn	Ala	Val	Ala	Tyr	Tyr	Arg	Gly	Leu	Asp	Val	Ser	Val	Ile	Pro	
7095					405					410					415		
7096																	
7097	ACT	ATC	GGA	GAC	GTC	GTT	GTC	GTG	GCA	ACA	GAC	GCT	CTG	ATG	ACG	GGC	1296
7098	Thr	Ile	Gly	Asp	Val	Val	Val	Val	Ala	Thr	Asp	Ala	Leu	Met	Thr	Gly	
7099				420					425					430			
7100																	
7101	TAT	ACG	GGC	GAC	TTT	GAC	TCA	GTG	ATC	GAC	TGT	AAC	ACA	TGT	GTC	ACC	1344
7102	Tyr	Thr	Gly	Asp	Phe	Asp	Ser	Val	Ile	Asp	Cys	Asn	Thr	Cys	Val	Thr	
7103	_		435	-		_		440		-	_		445	_			
7104																	
7105	CAG	ACA	GTC	GAC	TTC	AGC	TTG	GAT	CCC	ACC	TTC	ACC	ATT	GAG	ACG	ACG	1392
7106	Gln	Thr	Val	Asp	Phe	Ser	Leu	Asp	Pro	Thr	Phe	Thr	Ile	Glu	Thr	Thr	
7107		450		-			455	-				460					
7108																	
7109	ACC	GTG	ССТ	CAA	GAC	GCA	GTG	TCG	CGC	TCG	CAG	CGG	CGG	GGT	AGG	ACT	1440
7110						Ala											2110
7111	465					470			9		475	9	9	1	9	480	
7112	100					-,0					1,5						
7113	aaa	ΔCC	CCT	ΔCC	ΔCIA	GGC	ΔͲሮ	ጥልሮ	ΔGG	முரு	стс	ΣСП	cca	GGA	GAA	CGG	1488
7113						Gly											1400
7114	СТУ	nr 9	GIA	Try	485	GTÀ	116	+ A T	y	490	v a T	TILL	FIU	GIY	495	AT A	
7116					400					4 20					セクコ		
	aaa	maa	aaa	λ m.α	mma	CI N ITT	maa	maa	ama	OEC	mam	a A a	шаа	mam	as a	aaa	1526
7117						GAT											1536
7118	Pro	ser	СΤΆ	мет	rne	Asp	ser	ser	val	ьeu	cys	GLU	cys	Tyr	Asp	ата	

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999 TIME: 11:22:57

															IN	NPI/T	SET:	S31474.raw
	7119				500					505					510			
	7120																	
	7121	GGC	TGT	GCT	TGG	TAC	GAG	CTC	ACC	ccc	GCC	GAG	ACC	TCG	GTT	AGG	TTG	1584
	7122				Trp													
	7123	2	- 4 -	515		- 3 -			520					525		3		
	7124																	
	7125	CGG	GCC	TAC	CTG	AAC	ACA	CCA	GGG	TTG	ccc	GTT	TGC	CAG	GAC	CAC	CTG	1632
	7126				Leu													
	7127	5	530	- 2				535	2				540					
	7128																	
	7129	GAG	TTC	TGG	GAG	AGT	GTC	TTC	ACA	GGC	CTC	ACC	CAT	ATA	GAT	GCA	CAC	1680
	7130	Glu	Phe	Trp	Glu	Ser	Val	Phe	Thr	Gly	Leu	Thr	His	Ile	Asp	Ala	His	
	7131	545		•			550			-		555			•		560	
	7132																	
	7133	TTC	TTG	TCC	CAG	ACC	AAG	CAG	GCA	GGA	GAC	AAC	TTC	CCC	TAC	CTG	GTA	1728
	7134	Phe	Leu	Ser	Gln	Thr	Lys	Gln	Ala	Gly	Asp	Asn	Phe	Pro	Tyr	Leu	Val	
	7135					565	_			_	570				_	575		
	7136																	
	7137	GCA	TAC	CAA	GCC	ACG	GTG	TGC	GCC	AGG	GCT	CAG	GCC	CCA	CCT	CCA	TCA	1776
	7138	Ala	Tyr	Gln	Ala	Thr	Val	Cys	Ala	Arg	Ala	Gln	Ala	Pro	Pro	Pro	Ser	
	7139				580					585					590			
	7140																	
	7141	TGG	GAT	CAA	ATG	TGG	AAG	TGT	CTC	ATA	CGG	CTG	AAA	CCT	ACG	CTG	CAC	1824
	7142	Trp	Asp	Gln	Met	Trp	Lys	Cys	Leu	Ile	Arg	Leu	Lys	Pro	Thr	Leu	His	
	7143			595					600					605		•		
	7144																	•
	7145	GGG	CCA	ACA	CCC	TTG	CTG	TAC	AGG	CTG	GGA	GCC	GTC	CAA	AAT	GAG	GTC	1872
	7146	Gly	Pro	Thr	Pro	Leu	Leu	_	Arg	Leu	Gly	Ala	Val	Gln	Asn	Glu	Val	
	7147		610					615					620					
	7148																	
	7149				CAC													1920
	7150		Leu	Thr	His	Pro		Thr	Lys	Tyr	Ile		Ala	Cys	Met	Ser		
	7151	625					630					635					640	
	7152																	
	7153				GTC			TAG										1941
	7154	Asp	Leu	Glu	Val		Thr											
	7155					645												
	7156																	
>	7157	(2)	INF	ORMA	TION	FOR	SEO	ID I	NO: 1	17:								
-	7158	(-,					~ <b>~</b> ¥			•								
	7159		(i	) SE	QUEN	CE CI	HARA	CTER	ISTI	cs:								
	7160		` -		A) L						rs							
	7161				B) T					-								
	7162				c) s'													
	7163				D) T					<b>.</b>								
	7164			•	, -		1											
	7165		(ii	) MO	LECU:	LE T	YPE:	cDN	A									
	7166		,	•		-	- 1											
	7167																	
	7168																	
	7169																	
	7170		/ :		a mirito:	n.												

(ix) FEATURE:

7170

### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

INPUT SET: S31474.raw

														IN	<i>PUT</i>	SET:	S31474.raw
7171			( 2	A) NA	AME/E	KEY:	CDS										
7172			( I	3) L(	CAT	ON:	1	1941									
7173																	
7174																	
7175		(xi	) SE	QUEN	CE DE	ESCRI	CPTIC	on: s	SEQ :	ED NO	0:11	7:					
7176		•		_					~								
7177	ATG	CAT	ATG	CAT	CAT	CAT	CAC	CAT	CAT	CTG	GTG	CCG	CGC	GGC	AGC	GCG	48
7178					His												
7179	1				5					10			5	3	15		
7180	_				_												
7181	CCC	ATC	ACG	GCC	TAC	TCC	CAA	CAG	ACG	CGG	GGC	СТА	СТТ	GGT	TGC	ATC	96
7182					Tyr												
7183				20	- 1 -				25	9	1			30	- ] -		
7184																	
7185	AAG	۵СТ	AGC	СТТ	ACA	aac	CGG	GAC	AAG	ልልሮ	CAG	GTC	GAG	GGA	GAG	GTT	144
7186					Thr												111
7187	Lys	1111	35	пец		CLy	A- 9	40	Lys	AD!!	0111	Val	45	CLY	OLU	<b>V</b> 41	
7188			33					40					43				
7189	CAG	ama.	CITHE	TCC	ACC	CCA	אמא	CAA	TCC	ጥጥር	СТС	aca	A C C	TICC	GTC.	አልሮ	192
7190					Thr												172
7190	GIII	50	Val	261	1111	AIG	55	GIII	261	FILE	пеп	60	1111	Cys	Val	ASII	
7191		50					33					00					
7192	aaa	OTTO	тст	maa	ACC	C/P/P	m a c	СУП	CCT	COM	aaa	መር እ	220	N C C	תיווים	aaa	240
7193					Thr												240
7194	65	Val	Cys	пр	1111	70	ıyı	nis	СТУ	мта	_	Ser	гуз	1111	Leu	80	
	63					70					75					00	
7196	000	003	220	000	003	ъ ша	3.00	ana	х ш с	шаа	3 O.M.	3 3 m	ama	ana	ara	a a a	200
7197					CCA												288
7198	GIY	Pro	гàг	GTA	Pro	тте	THE	GIN	мес		Thr	ASN	vaı	ASP		ASP	
7199					85					90					95		
7200	ата	ama	999	<b></b>	a.a	222	~~~	<b>a</b> aa	<b>a</b> aa	aaa		maa	mma			таа	226
7201					CAG												336
7202	геп	vaı	GTA	_	Gln	ALA	PIO	PIO	_	АТА	Arg	ser	Leu		PIO	cys	
7203	•			100					105					110			
7204	100	mam	999		max	a.a	amm	mag	mma	ama			a.m	aam	a.a	ama.	204
7205					TCA												384
7206	Thr	cys	-	ser	Ser	Asp	Leu		Leu	var	Thr	Arg		АТа	Asp	vaı	
7207			115					120					125				
7208			~														400
7209					CGG												432
7210	тте		vaı	arg	Arg	Arg	-	Asp	ser	Arg	GTA		Leu	Leu	ser	PIO	
7211		130					135					140					
7212																	
7213					TAC												480
7214		Pro	Val	Ser	Tyr		Lys	GTÀ	Ser	Ser	_	GTÀ	Pro	Leu	Leu		
7215	145					150					155					160	
7216																	
7217					GCT												528
7218	Pro	Ser	Gly	His	Ala	Val	GLA	Ile	Phe		Ala	Ala	Val	Cys		Arg	
7219					165					170					175		
7220																	
7221					GCG												576
7222	Gly	Val	Ala	_	Ala	Val	Asp	Phe		Pro	Val	Glu	Ser		Glu	Thr	
7223				180					185					190			

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999 TIME: 11:22:57

														'			
7224				mam		ama	mma	אממ	GAC	አልሮ	ጥሮ እ	ሞሮሮ	כככ	CCG	GCC	GTA	624
7225	ACT	ATG	CGG	TCT	Dro	Ual	Dhe	Thr	Asn	Asn	Ser	Ser	Pro	Pro	Ala	Val	
7226 7227	THE	мес	195	ser	PLO	Val	FILC	200					205				
7227			1)3														•
7229	CCG	CAG	TCA	ттт	CAA	GTG	GCC	CAC	CTA	CAC	GCT	CCC	ACT	GGC	AGC	GGC	672
7230	Pro	Gln	Ser	Phe	Gln	Val.	Ala	His	Leu	His	Ala	Pro	Thr	Gly	Ser	Gly	
7231		210					215					220					
7232																	
7233	AAG	AGT	ACT	AAA	GTG	CCG	GCT	GCA	TAT	GCA	GCC	CAA	GGG	TAC	AAG	GTG	720
7234	Lys	Ser	Thr	Lys	Val	Pro	Ala	Ala	Tyr	Ala		Gln	Gly	Tyr	Lys	Val	
7235	225					230					235					240	
7236				_							mm a	000	mmm	aaa	aaa	ጥልጥ	768
7237	CTC	GTC	CTC	AAT	CCG	TCC	GTT	GCC	GCT	ACC	TTA	COG	Pho	GGG	λla	Tur	, 50
7238	Leu	Val	Leu	Asn		Ser	vaı	Ala	ATA	250	rea	сту	FILE	Gly	255	- y -	
7239					245					250					233		•
7240	N	mam	220	aa x	CAC	COT	א יויייי	GAC	רככ	AAC	ATC	AGA	ACT	GGG	GTA	AGG	816
7241	ATG	TCT	AAG	λla	Hig	GIV	Tle	Asn	Pro	Asn	Ile	Ara	Thr	Gly	Val	Arq	
7242 7243	мес	Ser	гуз	260	1113	GLY	110	nop	265			3		270			
7243				200													
7245	ACC	АТТ	ACC	ACA	GGC	GCC	CCC	GTC	ACA	TAC	TCT	ACC	TAT	GGC	AAG	TTT	864
7246	Thr	Ile	Thr	Thr	Gly	Ala	Pro	Val	Thr	Tyr	Ser	Thr	Tyr	Gly	Lys	Phe	
7247			275		-			280					285				
7248																	010
7249	CTT	GCC	GAT	GGT	GGT	TGC	TCT	GGG	GGC	GCT	TAT	GAC	ATC	ATA	ATA	TGT	912
7250	Leu	Ala	Asp	Gly	Gly	Cys	Ser	Gly	Gly	Ala	Tyr			Ile	Ile	Cys	
7251		290					295					300					
7252								maa	. am	202	» ma	mma	aaa	አመረ	aac	እሮአ	960
7253	GAT	GAG	TGC	CAT	TCA	ACT	GAC	TCG	ACT	ACA	ATC	TTG	GGC	Tla	GGC Gl v	ACA	<b>700</b>
7254			cys	HIS	Ser			ser	TILL	1111	315	ьеч	GLY	110	019	Thr 320	
7255	305					310					313						
7256 7257	ama.	CTC	CAC	CAA	aca	GAG	ΔCG	сст	GGA	GCG	CGG	CTT	GTC	GTG	CTC	GCC	1008
7257 7258	Val	Len	Asn	Gln	Δla	Glu	Thr	Ala	Glv	Ala	Arq	Leu	Val	Val	Leu	Ala	
7259	Vul		110 P	<b>U</b>	325				•	330					335		
7260																	
7261	ACC	GCT	ACG	CCT	CCG	GGA	TCG	GTC	ACC	GTG	CCA	CAC	CCA	AAC	ATC	GAG	1056
7262	Thr	Ala	Thr	Pro	Pro	Gly	Ser	Val	Thr	Val	Pro	His	Pro	) Asn	Ile	Glu	
7263				340	)				345					350			
7264																aaa	1104
7265	GAG	GTG	GCC	CTG	TCT	' AAT	ACT	GGA	GAG	ATC	CCC	TTC	TAT	GGC	AAA	GCC	1104
7266	Glu	Val			ı Ser	Asr	Thr			ı ITE	Pro	Pne	Tyr	. Сту	, га	Ala	
7267			355	i				360	ı				365	)			
7268										3.00	י מאח	י מיזיני	י אתיח	י ייייר	י יייניי	יי מיט	1152
7269	ATC	CCC	ATI	GAA	I GCC	ATC	AGG	. 000	, GGF	A AGG	, UAI	. CIC	Tle	Phe	CVS	CAT His	
7270	TTE			GIL	1 AT	і тте	375		, GT	ALC	, 1112	380			. 0,1		
7271		370	,				3/5	,				500	•				
7272 7273	m/d/c	• אאר	אא נ		ን ምርያር	' (3A)	CAC	CTC	: GCC	g GC	AAC	CTC	TCA	A GGC	CTC	GGA	1200
7274	200	LUC	I.V	I.ve	S CV	Asr	Gli	ı Lei	ı Ala	a Ala	Lys	s Lei	ı Sei	c Gly	, Lei	gly	
7274	385		٠ ١٠ ١	- <b>-</b> , .	- J,	390					395	5				400	
7276	500	•				•											

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

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7277	ATC	AAC	GCT	GTG	GCG	TAT	TAC	CGG	GGG	CTC	GAT	GTG	TCC	GTC	ATA	CCA	1248
7278	Ile	Asn	Ala	Val	Ala	Tyr	Tyr	Arg	Gly	Leu	Asp	Val	Ser	Val	Ile	Pro	
7279					405	-	•	_	•	410	-				415		
7280																	
7281	ACT	ATC	GGA	GAC	GTC	GTT	GTC	GTG	GCA	ACA	GAC	GCT	CTG	ATG	ACG	GGC	1296
7282						Val											
7283			•	420					425		-			430		•	
7284																	
7285	TAT	ACG	GGC	GAC	TTT	GAC	TCA	GTG	ATC	GAC	TGT	AAC	ACA	TGT	GTC	ACC	1344
7286						Asp											
7287	-		435	_		_		440		_	_		445	-			
7288																	
7289	CAG	ACA	GTC	GAC	TTC	AGC	TTG	GAT	CCC	ACC	TTC	ACC	ATT	GAG	ACG	ACG	1392
7290	Gln	Thr	Val	Asp	Phe	Ser	Leu	Asp	Pro	Thr	Phe	Thr	Ile	Glu	Thr	Thr	
7291		450		_			455	_				460					
7292																	
7293	ACC	GTG	CCT	CAA	GAC	GCA	GTG	TCG	CGC	TCG	CAG	CGG	CGG	GGT	AGG	ACT	1440
7294	Thr	Val	Pro	Gln	Asp	Ala	Val	Ser	Arg	Ser	Gln	Arg	Arg	Gly	Arg	Thr	•
7295	465					470					475				_	480	
7296																	
7297	GGC	AGG	GGT	AGG	AGA	GGC	ATC	TAC	AGG	TTT	GTG	ACT	CCG	GGA	GAA	CGG	1488
7298	Gly	Arg	Gly	Arg	Arg	Gly	Ile	Tyr	Arg	Phe	Val	Thr	Pro	Gly	Glu	Arg	
7299					485					490					495		
7300																	
7301						GAT											1536
7302	Pro	Ser	Gly	Met	Phe	Asp	Ser	Ser		Leu	Cys	Glu	Cys	Tyr	Asp	Ala	
7303				500					505					510			
7304																	
7305						GAG											1584
7306	Gly	Cys		Trp	Tyr	Glu	Leu		Pro	Ala	Glu	Thr		Val	Arg	Leu	
7307			515					520					525				
7308																	
7309						ACA											1632
7310	Arg		Тyr	Leu	Asn	Thr		Gly	Leu	Pro	Val	_	Gln	Asp	His	Leu	
7311		530					535					540					
7312																	
7313						GTC											1680
7314	GTu	Phe	Trp	GLu	Ser	Val	Phe	Thr	GTÀ	Leu	Thr	His	Ile	Asp	Ala	His	

7315	545					550					555					560	
7316		mm.a	<b></b>	~.~			~~~	~~	~~.	~~~			~~~				
7317					ACC												1728
7318	Phe	Leu	Ser	GIn	Thr	гàг	GIn	Ala	GTÀ	_	Asn	Phe	Pro	Tyr		Va⊥	
7319					565					570					575		
7320																	
7321	GCA	TAC	CAA	GCC	ACG	GTG	TGC	GCC	AGG	GCT	CAG	GCC	CCA	CCT	CCA	TCA	1776
7322	Ala	Tyr	Gln	Ala	Thr	Val	Cys	Ala	Arg	Ala	Gln	Ala	Pro	Pro	Pro	Ser	
7323				580					585					590			
7324																	
7325	TGG	GAT	CAA	ATG	TGG	AAG	TGT	CTC	ATA	CGG	CTG	AAA	CCT	ACG	CTG	CAC	1824
7326	Trp	Asp	Gln	Met	Trp	Lys	Cys	Leu	Ile	Arg	Leu	Lys	Pro	Thr	Leu	His	
7327			595					600					605				
7328																	
7329	GGG	CCA	ACA	CCC	TTG	CTG	TAC	AGG	CTG	GGA	GCC	GTC	CAA	AAT	GAG	GTC	1872

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ГМ	UC.	U.S

### RAW SEQUENCE LISTING PATENT APPLICATION US/09/198,723A

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															<b>VPUT</b>	SET:	S31474.	.raw	
7330	Gly	Pro	Thr	Pro	Leu	Leu	Tyr	Arg	Leu	Gly	Ala	Val	Gln	Asn	Glu	Val			
7331		610					615					620							
7332																			
7333	ACC	CTC	ACC	CAC	CCC	ATA	ACC	AAA	TAC	ATC	ATG	GCA	TGC	ATG	TCG	GCC		1920	
7334	Thr	Leu	Thr	His	Pro	Ile	Thr	Lys	Tyr	Ile	Met	Ala	Cys	Met	Ser	Ala			
7335	625					630		_	_		635					640			
7336																			
7337	GAC	CTG	GAG	GTC	GTT	ACG	TAG											1941	
7338	Asp	Leu	Glu	Val	Val	Thr													
7339	_				645														
7340																			
7341																			
7890	(2)	INF	ORMA'	rion	FOR	SEQ	ID	NO:1	21:		(i):	SEQUI	ENCE	CHA	RACTI	ERIST	rics:		— (A) L

# SEQUENCE VERIFICATION REPORT PATENT APPLICATION US/09/198,723A

DATE: 04/15/1999 TIME: 11:22:58

Line	Error	Original Text
13	Number of Sequences (123) Doesn't Equal Actual Count (10	OQiii) NUMBER OF SEQUENCES: 123
4198	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:
4270	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:
4342	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:
4415	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:
4487	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:
4559	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:
4631	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:
4701	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:
4773	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:
4830	Sequence 93 thru 101 missing	(2) INFORMATION FOR SEQ ID NO:102:
5032	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:
5218	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:
5403	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:
5588	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:
5773	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:
5959	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:108
6143	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:
6329	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:
6499	Sequence 103 thru 110 missing	(2) INFORMATION FOR SEQ ID NO:111:
6773	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:113
6846	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:
6918	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:
6991	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:116:
7157	Sequence 113 thru 116 missing	(2) INFORMATION FOR SEQ ID NO:117:

(2) INFORMATION FOR SEQ PNO:60:

09/198,723

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: (668 amino acid
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: protein
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

Met His Met His His His His His Leu Val Pro Arg Gly Ser Ala Pro Ile Thr Ala Tyr Ser Gln Gln Thr Arg Gly Leu Leu Gly Cys Lys Ile Thr Ser Leu Thr Gly Arg Asp Lys Asn Gln Val Glu Gly Glu Val Gln Val Val Ser Thr Ala Thr Gln Ser Phe Leu Ala Thr Cys Val Asn Gly Val Cys Trp Thr Val Tyr His Gly Ala Gly Ser Lys Thr Leu Ala Gly Pro Lys Gly Pro Ile Thr Gln Met Tyr Thr Asn Val Asp Gln Asp Leu Val Gly Trp Gln Ala Pro Pro Gly Ala Arg Ser Leu Thr Pro Cys 105 Thr Cys Gly Ser Ser Asp Leu Tyr Leu Val Thr Arg His Ala Asp Val Ile Pro Val Arg Arg Arg Gly Asp Ser Arg Gly Ser Leu Leu Ser Pro 130 Arg Pro Val Ser Tyr Leu Lys Gly Ser Ser Gly Gly Pro Leu Leu Cys 145 150 160 Pro Ser Gly His Ala Val Gly Ile Phe Arg Ala Ala Val Cys Thr Arg 165 170 Gly Val Ala Lys Ala Val Asp Phe Val Pro Val Glu Ser Met Glu Thr 185 Thr Met Arg Ser Pro Val Phe Thr Asp Asn Ser Ser Pro Pro Ala Val 195 Pro Gln Ser Phe Gln Val Ala His Leu His Ala Pro Thr Gly Ser Gly 210 215 220 Lys Ser Thr Lys Val Pro Ala Ala Tyr Ala Ala Gln Gly Tyr Lys Val 230

Leu Val Leu Asn Pro Ser Val Ala Ala Thr Leu Gly Phe Gly Ala Tyr

255

Met Ser Lys Ala His Gly Ile Asp Pro Asn Ile Arg Thr Gly Val Arg Thr Ile Thr Thr Gly Ala Pro Val Thr Tyr Ser Thr Tyr Gly Lys Phe Leu Ala Asp Gly Gly Cys Ser Gly Gly Ala Tyr Asp Ile Ile Cys 295 Asp Glu Cys His Ser Thr Asp Ser Thr Thr Ile Leu Gly Ile Gly Thr 315 Val Leu Asp Gln Ala Glu Thr Ala Gly Ala Arg Leu Val Val Leu Ala 325 330 Thr Ala Thr Pro Pro Gly Ser Val Thr Val Pro His Pro Asn Ile Glu 340 350 Glu Val Ala Leu Ser Asn Thr Gly Glu Ile Pro Phe Tyr Gly Lys Ala Ile Pro Ile Glu Ala Ile Arg Gly Gly Arg His Leu Ile Phe Cys His Ser Lys Lys Lys Cys Asp Glu Leu Ala Ala Lys Leu Ser Gly Leu Gly 385 400 Ile Asn Ala Val Ala Tyr Tyr Arg Gly Leu Asp Val Ser Val Ile Pro 410 Thr Ile Gly Asp Val Val Val Ala Thr Asp Ala Leu Met Thr Gly Tyr Thr Gly Asp Phe Asp Ser Val Ile Asp Cys Asn Thr Cys Val Thr 435 Gln Thr Val Asp Phe Ser Leu Asp Pro Thr Phe Thr Ile Glu Thr Thr 450 Thr Val Pro Gln Asp Ala Val Ser Arg Ser Gln Arg Arg Gly Arg Thr 475 Gly Arg Gly Arg Gly Ile Tyr Arg Phe Val Thr Pro Gly Glu Arg 490 Pro Ser Gly Met Phe Asp Ser Ser Val Leu Cys Glu Cys Tyr Asp Ala 500 Gly Cys Ala Trp Tyr Glu Leu Thr Pro Ala Glu Thr Ser Val Arg Leu 520 525 Arg Ala Tyr Leu Asn Thr Pro Gly Leu Pro Val Cys Gln Asp His Leu 535 Glu Phe Trp Glu Ser Val Phe Thr Gly Leu Thr His Ile Asp Ala His

Sle reft page

550 545 555 560 Phe Leu Ser Gln Thr Lys Gln Ala Gly Asp Asn Phe Pro Tyr Leu Val Ala Tyr Gln Ala Thr Val Cys Ala Arg Ala Gln Ala Pro Pro Pro Ser Trp Asp Gln Met Trp Lys Cys Leu Ile Arg Leu Lys Pro Thr Leu His 600 Gly Pro Thr Pro Leu Leu Tyr Arg Leu Gly Ala Val Gln Asn Glu Val Thr Leu Thr His Pro Ile Thr Lys Tyr Ile Met Ala Cys Met Ser Ala delute stop coton 635 630 The wa New SED FO NO. Glu Phe Glu Leu Arg Arg Gln Ala Cys Asp Leu Glu Val Val Thr Gly Arg Thr Arg Ala Pro Pro Pro Pro Leu Arg 665 IP mre anni audi following a stop coder (*) reede its our SEQ FD NO. Please adjust He ( [ii]) NUMBER OF SERVENY response, too (R.1)Examini: The amended diskette ple Showed 646 amin oudi in Seg. 60, but did not show He 21 anero ouds as a separat requerce. They are mining exterely from the figure Listing. My this is on eva, phone call 308-4/2/2 (STIC).

### (2) INFORMATION FOR SEQ I

ORMATION FOR SEQ NO:69:

(i) SEQUENCE CHARACTERISTICS: 646 show

(A) LENGTH: 668 amino acids

- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

#### (ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

Met His Met His His His His Leu Val Pro Arg Gly Ser Ala Pro Ile Thr Ala Tyr Ser Gln Gln Thr Arg Gly Leu Leu Gly Cys Ile Ile Thr Ser Leu Thr Gly Arg Asp Lys Asn Gln Val Glu Gly Glu Val 35 Gln Val Val Ser Thr Ala Thr Gln Ser Phe Leu Ala Thr Cys Val Asn Gly Val Cys Trp Thr Val Tyr His Gly Ala Gly Ser Lys Thr Leu Ala Gly Pro Lys Gly Pro Ile Thr Gln Met Tyr Thr Asn Val Asp Gln Asp Leu Val Gly Trp Gln Ala Pro Pro Gly Ala Arg Ser Leu Thr Pro Cys 105 Thr Cys Gly Ser Ser Asp Leu Tyr Leu Val Thr Arg His Ala Asp Val Ile Pro Val Arg Arg Arg Gly Asp Ser Arg Gly Ser Leu Leu Ser Pro 130 135 Arg Pro Val Ser Tyr Leu Lys Gly Ser Ser Gly Gly Pro Leu Leu Cys 150 160 Pro Ser Gly His Ala Val Gly Ile Phe Arg Ala Ala Val Cys Thr Arg 165 170 Gly Val Ala Lys Ala Val Asp Phe Val Pro Val Glu Ser Met Glu Thr 185 Thr Met Arg Ser Pro Val Phe Thr Asp Asn Ser Ser Pro Pro Ala Val 195 Pro Gln Ser Phe Gln Val Ala His Leu His Ala Pro Thr Gly Ser Gly 210 215 220 Lys Ser Thr Lys Val Pro Ala Ala Tyr Ala Ala Gln Gly Tyr Lys Val

Leu Val Leu Asn Pro Ser Val Ala Ala Thr Leu Gly Phe Gly Ala Tyr

245 250 255

Met Ser Lys Ala His Gly Ile Asp Pro Asn Ile Arg Thr Gly Val Arg Thr Ile Thr Thr Gly Ala Pro Val Thr Tyr Ser Thr Tyr Gly Lys Phe 275 Leu Ala Asp Gly Gly Cys Ser Gly Gly Ala Tyr Asp Ile Ile Cys 295 Asp Glu Cys His Ser Thr Asp Ser Thr Thr Ile Leu Gly Ile Gly Thr 315 Val Leu Asp Gln Ala Glu Thr Ala Gly Ala Arg Leu Val Val Leu Ala Thr Ala Thr Pro Pro Gly Ser Val Thr Val Pro His Pro Asn Ile Glu 340 Glu Val Ala Leu Ser Asn Thr Gly Glu Ile Pro Phe Tyr Gly Lys Ala Ile Pro Ile Glu Ala Ile Arg Gly Gly Arg His Leu Ile Phe Cys His Ser Lys Lys Cys Asp Glu Leu Ala Ala Lys Leu Ser Gly Leu Gly 385 400 Ile Asn Ala Val Ala Tyr Tyr Arg Gly Leu Asp Val Ser Val Ile Pro Thr Ser Gly Asp Val Val Val Ala Thr Asp Ala Leu Met Thr Gly Tyr Thr Gly Asp Phe Asp Ser Val Ile Asp Cys Asn Thr Cys Val Thr 435 Gln Thr Val Asp Phe Ser Leu Asp Pro Thr Phe Thr Ile Glu Thr Thr 450 455 Thr Val Pro Gln Asp Ala Val Ser Arg Ser Gln Arg Arg Gly Arg Thr 475 Gly Arg Gly Arg Arg Gly Ile Tyr Arg Phe Val Thr Pro Gly Glu Arg 490 Pro Ser Gly Met Phe Asp Ser Ser Val Leu Cys Glu Cys Tyr Asp Ala 500 Gly Cys Ala Trp Tyr Glu Leu Thr Pro Ala Glu Thr Ser Val Arg Leu 520 Arg Ala Tyr Leu Asn Thr Pro Gly Leu Pro Val Cys Gln Asp His Leu 535 Glu Phe Trp Glu Ser Val Phe Thr Gly Leu Thr His Ile Asp Ala His Phe Leu Ser Gln Thr Lys Gln Ala Gly Asp Asn Phe Pro Tyr Leu Val 565 570 575

Ala Tyr Gln Ala Thr Val Cys Ala Arg Ala Gln Ala Pro Pro Pro Ser 580 585 590

Trp Asp Gln Met Trp Lys Cys Leu Ile Arg Leu Lys Pro Thr Leu His 595 600 605

Gly Pro Thr Pro Leu Leu Tyr Arg Leu Gly Ala Val Gln Asn Glu Val 610 615 620

Thr Leu Thr His Pro Ile Thr Lys Tyr Ile Met Ala Cys Met Ser Ala 625 630 640

Asp Leu Glu Val Val Thr (*) Glu Phe Glu Leu Arg Arg Gln Ala Cys

Gly Arg Thr Arg Ala Pro Pro Pro Pro Pro Lèu Arg

(2) INFORMATION FOR SEQ ID NO:70:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: A base pairs
  - (B) TYPE: nacheic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLØGY: linear

(ii) MOLECULE TYPE: CDNA

Maron